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                 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
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                 50 Millionth Unique Chemical Substance Recorded in
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         OCT 21 Derwent World Patents Index enhanced with human
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                 Utility Models
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         NOV 23 Annual Reload of IFI Databases
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         DEC 01 FRFULL Content and Search Enhancements
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                 feature for sorting BLAST answer sets
NEWS 14
         DEC 02
                 Derwent World Patent Index: Japanese FI-TERM
                 thesaurus added
NEWS 15
         DEC 02
                 PCTGEN enhanced with patent family and legal status
                 display data from INPADOCDB
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         DEC 02
                 USGENE: Enhanced coverage of bibliographic and
                 sequence information
         DEC 21
                 New Indicator Identifies Multiple Basic Patent
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=> s 11 SAMPLE SEARCH INITIATED 18:43:57 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 445 TO ITERATE

100.0% PROCESSED 445 ITERATIONS 8 ANSWERS

SEARCH TIME: 00.00.01

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PROJECTED ITERATIONS: 7635 TO 10165

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=> search 11
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FULL SCREEN SEARCH COMPLETED - 8746 TO ITERATE

100.0% PROCESSED 8746 ITERATIONS 167 ANSWERS

SEARCH TIME: 00.00.01

L3 167 SEA SSS FUL L1

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CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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L4 31 L3
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L4 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2009:176608 CAPLUS

DN 150:229659

- TI Methods and compositions using peptides and other compounds for derepression of IAP (inhibitor of apoptosis protein)-inhibited caspase, and therapeutic use
- IN Reed, John C.; Houghten, Richard A.; Nefzi, Adel; Ostresh, John M.;
 Pinilla, Clemencia; Welsh, Kate
- PA The Burnham Institute, USA
- SO U.S. Pat. Appl. Publ., 256pp., Cont.-in-part of U.S. Ser. No. 886m385. CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 2

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PATENT FAMILY INFORMATION:

FAN 2006:977385

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											WO	2006-	-US96	95		W	20060	317
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                                       US 2005-84714
                                                           A 20050317
                                       US 2005-186629
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EP 1865977
                           20071219
                                       EP 2006-738724
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                                       WO 2006-US9695
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                           20080925
                                       JP 2008-502089
JP 2008537735
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                                       US 2005-84714
                                                           A 20050317
                                       US 2005-186629
                                                           A 20050719
                                                           W 20060317
                                       WO 2006-US9695
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OS MARPAT 150:229659

AB The invention provides isolated agents having novel chemical structures and possessing superior activity as derepressors of IAP-inhibited caspase. The invention further provides a method of derepressing an IAP-inhibited caspase. The invention further provides assay methods employing labeled compds. Of the invention, especially fluorescent labeled compds. An advantage of an agent of the invention is that it can be used to allow apoptosis to occur in a cell where apoptosis is being prevented by the regulatory activity of an IAP. Also provided is a method of treating an individual having a condition characterized by a pathol. reduced level of apoptosis, e.g. cancer or hyperplasia, by administering an agent of the invention, wherein the agent derepresses an IAP-inhibited caspase, thereby increasing the level of apoptosis. Compds. of the invention include both peptides and nonpeptide compds., e.g. polyphenylurea compds.

IT 1116141-36-6D, derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(IAP-inhibited caspase derepressor peptides and other compds., and therapeutic use)

RN 1116141-36-6 CAPLUS

CN Urea, N-[2-[methyl[(phenylamino)carbonyl]amino]ethyl]-N'-phenyl-N-[2-[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

L4 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2009:82735 CAPLUS

DN 151:221154

TI Synthesis of N-thioureido lariat calix[4]crown and calix[4]arene

tetrathioureido derivatives

AU Zheng, Xiao-Hua; Yang, Fa-Fu; Tang, Fu-Sheng; Yin, Feng-Ju; Yang, Yan-Xin

CS College of Chemistry and Materials, Fujian Normal University, Fuzhou, 350007, Peop. Rep. China

SO Youji Huaxue (2008), 28(12), 2159-2161 CODEN: YCHHDX; ISSN: 0253-2786

PB Youji Huaxue Bianjibu

DT Journal

LA Chinese

AB A method for the synthesis of the title compds. is reported here. Under control of the molar ratio of reactants, a calix[4]-aza-crown ether derivative and a ring-opened aza-calix[4]arene derivative were obtained by a reaction of 2,2'-[[26,28-dihydroxy-5,11,17,23-tetrakis(tert-butyl)calix[4]arene]bis(oxy)]bis[acetic acid] 1,1'-diethyl ester with N1-(2-aminoethyl)-1,2-ethanediamine. A reaction of the above-mentioned intermediates with Ph isothiocyanate delivered the title compds. (92% and 87% yield, resp.). The structures and conformations of new compds. were

IT 1072839-60-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of calix[4]arene thiourea derivs.)

RN 1072839-60-1 CAPLUS

CN Acetamide, 2,2'-[[5,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-dihydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-25,27-diyl]bis(oxy)]bis[N-[2-[[(phenylamino)thioxomethyl][2-[[(phenylamino)thioxomethyl]- (CA INDEX NAME)

characterized by elemental analyses, IR, ESI-MS, 1H NMR etc.

PAGE 1-A

PhNH N H

S

PhNH N H

PhNH N H

PhNH N H

S

T-Bu

--- Bu-t

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ANSWER 3 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
T.4
    2007:1472762 CAPLUS
ΑN
DN
    149:493360
ΤI
    Synthesis of calix[4]arene-thiourea derivative
ΑU
    Zheng, Xiao-hua; Yang, Fa-fu; Liu, Li-ming; Guo, Yu
    College of Chemistry and Materials Science, Fujian Normal University,
CS
    Fuzhou, 350007, Peop. Rep. China
    Hecheng Huaxue (2007), 15(5), 597-598
SO
    CODEN: HEHUE2; ISSN: 1005-1511
PB
    Hecheng Huaxue Bianjibu
DΤ
    Journal
LA
    Chinese
OS
    CASREACT 149:493360
AΒ
    dihydroxy[calix[4]arene]-25,27-diyl]bis(oxy)]bis[acetic acid] di-Et ester
    with excess diethylenetriamine gave
    2,2'-[[5,11,17,23-tetrakis(1,1-dimethylethyl)-26,28-
    dihydroxy[calix[4]arene]-25,27-diyl]bis(oxy)]bis[N-[2-(2-
    aminoethyl)ethyl]acetamide]. Treatment of the latter amide derivative with
    (isothiocyanato) benzene provided a new calix[4] arene derivative with four
    thiourea units. The structure was characterized by 1H NMR, IR, MS and
    elemental anal.
ΙT
    1072839-60-1P
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (preparation of calix[4]arene-thiourea derivative)
    1072839-60-1 CAPLUS
RN
CN
    dihydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-
    1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-25,27-
    diyl]bis(oxy)]bis[N-[2-[[(phenylamino)thioxomethyl][2-
    [[(phenylamino)thioxomethyl]amino]ethyl]amino]ethyl]- (CA INDEX NAME)
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PAGE 1-A

PAGE 1-B

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- L4 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2006:38992 CAPLUS
- DN 144:292512
- TI Solid-Supported Copper Catalysts for Atom-Transfer Radical Cyclizations: Assessment of Support Type and Ligand Structure on Catalyst Performance in the Synthesis of Nitrogen Heterocycles
- AU Clark, Andrew J.; Geden, Joanna V.; Thom, Stephen
- CS Department of Chemistry, University of Warwick, West Midlands, CV4 7AL, UK
- SO Journal of Organic Chemistry (2006), 71(4), 1471-1479 CODEN: JOCEAH; ISSN: 0022-3263
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 144:292512
- AB A range of solid-supported pyridinemethanimine (PMI) and polyamine ligands were prepared on SiO2, polystyrene (P), and JandaJel (JJ) supports. The

CuCl and CuBr complexes of these supported ligands were used to assess both the effect of the ligand type and the nature of the support upon a representative range of Cu-mediated atom transfer radical cyclizations of 5-exo-trig C13CCON(Ts)CH2CH:CH2 (6), BrCMe2CONTsCH2CH:CH2 (24), MeCCl2CONTsCH2CH: CH2 (25), 5-exo-dig Me2CBrNTsCH2C.tplbond.CH (26), 4-exo-trig Me2CBrCONBnC:C(CH2)5 (28), and 5-endo-trig derivs. Me2CBrCON(CH2Ph)R (R = 1-cyclohexen-1-y1, 27) and MeCHBrCON(CH2Ph)R (R = 1-cyclohexen-1-yl, 38) to give N-heterocycles. The effect of the nature of the support on the stereochem. outcome of the 5-exo cyclization of 25 was probed. Generally, the type of support (e.g., polystyrene, SiO2, or JandaJel) had very little effect upon the efficiency and selectivity of the processes, but the nature of the ligand type immobilized was the important factor. Thus, the 5-exo cyclization of 6 and 24-26 proceeded more rapidly with the PMI ligands, whereas 4-exo cyclizations 28 and 5-endo radical polar crossover reactions 27 and 38 proceeded more efficiently with the JJ-TEDETA ligand [Et2NCH2CH2]2NCH2CH2CO2-JJ (15). The efficiency of the supported ligands was also compared to their solution counterparts. The reusability of P-PMDETA ligand system, Me2NCH2CH2NMeCH2CH2NMeCH2CH2CH2-P (13), was assessed in the cyclization of

RN 878408-78-7 CAPLUS

CN Urea, N'-(3,4-dichlorophenyl)-N,N-bis[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} & \text{C1} \\ & \text{NH} \\ & \text{C} = \text{O} \\ & \text{NH} \\ & \text{CH}_2 \\ & \text{C1} \\ & \text{CH}_2 \\ & \text{CH}_2 \\ & \text{NH} - \text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{N} - \text{C} - \text{NH} \\ & \text{O} \\ & \text{C1} \\ & \text{C2} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ & \text{C2} \\ & \text{C4} \\ & \text{C1} \\ & \text{C2} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ & \text{C4} \\ & \text{C5} \\ & \text{C6} \\ & \text{C1} \\ & \text{C1} \\ & \text{C1} \\ & \text{C2} \\ & \text{C1} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ & \text{C4} \\ & \text{C1} \\ & \text{C1} \\ & \text{C1} \\ & \text{C2} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ & \text{C4} \\ & \text{C4} \\ & \text{C1} \\ & \text{C1} \\ & \text{C2} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ & \text{C4} \\ & \text{C4} \\ & \text{C4} \\ & \text{C5} \\ & \text{C1} \\ & \text{C1} \\ & \text{C1} \\ & \text{C1} \\ & \text{C2} \\ & \text{C2} \\ & \text{C3} \\ & \text{C4} \\ &$$

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RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2005:823561 CAPLUS

DN 143:229578

- Preparation of diurea derivatives as inhibitors of the production of ΤI
- pro-inflammatory cytokines, especially interleukin-2 (IL-2)
 IN Abramo, Aina Lisbeth; Pettersson, Lars Olof Goeran; Andersson, Kerstin Ingalill; Sundstedt, Asa Anette
- PA Active Biotech AB, Swed.
- SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent LA English

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OS CASREACT 143:229578; MARPAT 143:229578

AB The title compds. I [A = (un)substituted Ph, naphthyl, pyridyl, etc.; R1 = dimethylamino, diethylamino, pyrrolidino, etc.; Y = halo, dimethylamino, methoxy, etc.; Z = 0, S; n = 1-3; m = 2-4] that block intracellular signal transduction and thereby inhibit the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2) and/or induce apoptosis in activated T-cells, were prepared Thus, reacting 1-isocyanato-4-trifluoromethylbenzene with N1-[2-(pyrrolidin-1-yl)ethyl]ethane-1,2-diamine (preparation given) in CH2Cl2 afforded 80% 1-[2-(pyrrolidin-1-yl)ethyl]-3-(4-trifluoromethylphenyl)-1-{2-[3-(4-trifluoromethylphenyl)ureido]ethyl}urea which showed IC50 of 3 μM against PMA/Ionomycin stimulated IL-2 production in human T-cells. The invention further discloses such a compound I for use as a medicament, the use of said compound I for the manufacturing of a medicament for the treatment of

immune disorders which benefit from inhibition of production of IL-2 and other pro-inflammatory cytokines and/or induction of apoptosis in activated I-cells, a pharmaceutical composition comprising said compound I and a method

treatment comprising administration of a pharmaceutically effective amount of said compound I.

ΤТ 1044678-69-4 1044678-72-9 1044678-76-3 1044678-87-6 1044678-90-1 1044678-92-3 1044678-94-5 1044678-96-7 1044679-03-9 1044679-05-1 1044679-08-4 1044679-13-1 1044679-22-2 1044679-24-4 1044679-26-6 1044679-29-9 1044679-30-2 1044679-33-5 1044679-37-9 1044679-40-4 1044679-44-8 1044679-45-9 1044679-46-0 1044679-51-7 1044679-53-9 1044679-54-0 1044679-58-4 1044679-60-8 1044679-61-9 1044679-63-1 1044679-65-3 1044679-67-5 1044679-68-6 1044679-75-5 1044679-80-2

RL: PRPH (Prophetic)

(Preparation of diurea derivatives as inhibitors of the production of pro-inflammatory cytokines, especially interleukin-2 ($\rm IL-2$))

RN 1044678-69-4 CAPLUS

 $\circ f$

CN INDEX NAME NOT YET ASSIGNED

RN 1044678-72-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1044678-76-3 CAPLUS

CN

RN 1044678-87-6 CAPLUS
CN Urea, N-[2-[[2-(diethylamino)ethyl][[[4-(diethylamino)phenyl]amino]thioxomethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1044678-90-1 CAPLUS CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 2-A

RN 1044678-92-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 2-A

RN 1044678-94-5 CAPLUS

CN Urea, N-[2-[[[[4-(diethylamino)phenyl]amino]thioxomethyl][2-(dimethylamino)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1044678-96-7 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1044679-03-9 CAPLUS

CN Urea, N-[2-[[[4-(diethylamino)phenyl]amino]thioxomethyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

N

RN 1044679-05-1 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-08-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-13-1 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-22-2 CAPLUS
CN Urea, N-[2-[[[[4-(diethylamino)phenyl]amino]thioxomethyl][2-(1-pyrrolidinyl)ethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1044679-24-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-26-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-29-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-30-2 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-33-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1044679-37-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1044679-40-4 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]thioxomethyl][2-(diethylamino)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1044679-44-8 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1044679-45-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-46-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-51-7 CAPLUS
CN Urea, N-[2-[[[[4-(diethylamino)phenyl]amino]thioxomethyl][2-(dimethylamino)ethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1044679-53-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-54-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-58-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-60-8 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-61-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-63-1 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-65-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED

$$\begin{array}{c|c} & & & \\ & & & \\ \text{CH}_2 \\ \\ \text{NH}-\text{C}-\text{NH}-\text{CH}_2-\text{CH}_2-\text{N}-\text{C}-\text{NH} \\ \\ & & \\ \text{O} \end{array}$$

RN 1044679-67-5 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-68-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-75-5 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1044679-80-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

IT 862807-90-7P 862807-92-9P 862807-94-1P

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862807-96-3P
               862807-98-5P
                              862808-00-2P
862808-02-4P
               862808-04-6P
                              862808-06-8P
862808-08-0P
               862808-10-4P
                              862808-12-6P
862808-14-8P
               862808-18-2P
                              862808-20-6P
                              862808-26-2P
862808-22-8P
               862808-24-0P
862808-28-4P
               862808-30-8P
                              862808-32-0P
862808-34-2P
               862808-38-6P
                              862808-40-0P
862808-42-2P
               862808-44-4P
                              862808-46-6P
862808-48-8P
               862808-50-2P
                              862808-52-4P
862808-54-6P
               862808-56-8P
                              862808-58-0P
862808-60-4P
               862808-62-6P
                              862808-64-8P
               862808-68-2P
                              862808-70-6P
862808-66-0P
862808-72-8P
               862808-74-0P
                              862808-76-2P
862808-78-4P
               862808-80-8P
                              862808-82-0P
862808-84-2P
               862808-86-4P
                              862808-88-6P
               862808-92-2P
                              862808-94-4P
862808-90-0P
862809-05-0P
               862809-09-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of diurea derivs. as inhibitors of the production of
   pro-inflammatory cytokines, especially interleukin-2 (IL-2))
862807-90-7 CAPLUS
Urea, N-[2-[[2-(1-pyrrolidinyl)ethyl][[[4-
(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[4-
(trifluoromethyl)phenyl]- (CA INDEX NAME)
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RN 862807-92-9 CAPLUS
CN Thiourea, N'-(4-chlorophenyl)-N-[2-[[[(4-chlorophenyl)amino]thioxomethyl]amino]ethyl]-N-[2-(diethylamino)ethyl](CA INDEX NAME)

RN

CN

RN 862807-94-1 CAPLUS

CN Urea, N-[2-[[2-(1-piperidinyl)ethyl][[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862807-96-3 CAPLUS

CN Urea, N-[2-[[2-(diethylamino)ethyl][[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 862807-98-5 CAPLUS

CN Urea, N-[2-[[[[3,4-bis(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N-[2-(diethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-00-2 CAPLUS

CN Urea, N-[2-[[2-(diethylamino)ethyl][[(3fluorophenyl)amino]carbonyl]amino]ethyl]-N'-(3-fluorophenyl)-,
hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 862808-02-4 CAPLUS

CN Urea, N'-(4-chlorophenyl)-N-[2-[[[(4-chlorophenyl)amino]ethyl]-N-[2-(diethylamino)ethyl]- (CA INDEX NAME)

RN 862808-04-6 CAPLUS

CN Urea, N'-(4-bromophenyl)-N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N-[2-(dimethylamino)ethyl]- (CA INDEX NAME)

RN 862808-06-8 CAPLUS

CN Urea, N'-(4-chlorophenyl)-N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

RN 862808-08-0 CAPLUS
CN Urea, N'-(3-fluorophenyl)-N-[2-[[[(3-fluorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

RN 862808-10-4 CAPLUS
CN Urea, N-[2-[[3-(1-pyrrolidinyl)propyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-12-6 CAPLUS

CN Urea, N-[2-[[3-(dimethylamino)propyl][[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-14-8 CAPLUS

CN Urea, N-[2-[[2-[bis(1-methylethyl)amino]ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-18-2 CAPLUS

CN Urea, N-[2-[[2-(diethylamino)ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-20-6 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[2-[[[(4-chlorophenyl)amino]thioxomethyl][2-(diethylamino)ethyl]amino]ethyl]- (CA INDEX NAME)

RN 862808-22-8 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(dimethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 862808-24-0 CAPLUS

CN Urea, N-[2-(dimethylamino)ethyl]-N-[2-[[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-26-2 CAPLUS

CN Urea, N-[2-(diethylamino)ethyl]-N-[2-[[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-28-4 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(diethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-30-8 CAPLUS

CN Thiourea, N-[2-[[[(4-chlorophenyl)amino]thioxomethyl]amino]ethyl]-N'-(3-methoxyphenyl)-N-[2-(1-piperidinyl)ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{CH}_2 \\ & & \\ \text{CH}_2 \\ & & \\ \text{CH}_2 \\ & & \\ \text{NH}-\text{C}-\text{NH}-\text{CH}_2-\text{CH}_2-\text{N}-\text{C}-\text{NH} \\ & & \\ \text{S} \end{array}$$

RN 862808-32-0 CAPLUS

CN Urea, N-[2-[[2-(1-piperidinyl)ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-34-2 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-piperidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ \text{CH}_2 \\ & & \\ \text{CH}_3 \\ \end{array}$$

RN 862808-38-6 CAPLUS

CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl]][2- (diethylamino)ethyl]amino]ethyl]-N'-(2,6-dichloro-4-pyridinyl)- (CA INDEX NAME)

RN 862808-40-0 CAPLUS

CN Urea, N-[3-[[[(3-chlorophenyl)amino]carbonyl]amino]propyl]-N-[2-(dimethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ \parallel & \parallel & \parallel \\ \text{C-N-(CH}_2)_3-\text{NH-C-NH-} \\ \parallel & \parallel & \parallel \\ \text{F}_3\text{C} \end{array}$$

RN 862808-42-2 CAPLUS

CN Urea, N-[2-(diethylamino)ethyl]-N-[2-[[(1-naphthalenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]-(CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 862808-44-4 CAPLUS
CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl][2(diethylamino)ethyl]amino]ethyl]-N'-1-naphthalenyl- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 862808-46-6 CAPLUS

CN Urea, N-[2-[[[(3-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[3-(diethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-48-8 CAPLUS

CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N-[3-(diethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-50-2 CAPLUS

CN Urea, N-[2-(diethylamino)ethyl]-N-[2-[[[[4-(diethylamino)phenyl]amino]thioxomethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-52-4 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl][2-(1-pyrrolidinyl)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-54-6 CAPLUS

CN Urea, N'-(3-chlorophenyl)-N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-piperidinyl)ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & &$$

RN 862808-56-8 CAPLUS

CN Urea, N-[2-[[[(3-chlorophenyl)amino]carbonyl][2-(1-piperidinyl)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-58-0 CAPLUS

CN Urea, N-[2-[[2-(dimethylamino)ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-60-4 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N'-(3-methoxyphenyl)-N-[2-(1-piperidinyl)ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \text{CH}_2 \\ & & \\ \text{OMe} \end{array}$$

RN 862808-62-6 CAPLUS

CN Urea, N-[2-[[[(3-methoxyphenyl)amino]carbonyl][2-(1-piperidinyl)ethyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-64-8 CAPLUS

CN Urea, N-[2-[[2-(1-pyrrolidinyl)ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

PAGE 2-A

N

RN 862808-66-0 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-68-2 CAPLUS

CN Urea, N-[2-[[[(4-methoxyphenyl)amino]carbonyl]amino]ethyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-70-6 CAPLUS

CN Urea, N-(4-bromophenyl)-N'-[3-[[2-(1-pyrrolidinyl)ethyl][thioxo[[4-(trifluoromethyl)phenyl]amino]methyl]amino]propyl]- (CA INDEX NAME)

RN 862808-72-8 CAPLUS
CN Urea, N-[3-[[[(3-chlorophenyl)amino]carbonyl]amino]propyl]-N-[2-(1-pyrrolidinyl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-74-0 CAPLUS
CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl][2-(1-pyrrolidinyl)ethyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-76-2 CAPLUS

CN Urea, N-[2-[[[(3-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[3-(1-pyrrolidinyl)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-78-4 CAPLUS

CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N-[3-(1-pyrrolidinyl)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-80-8 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[3- (dimethylamino)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-82-0 CAPLUS

CN Urea, N-[3-(dimethylamino)propyl]-N-[2[[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-84-2 CAPLUS

CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 862808-86-4 CAPLUS

CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 862808-88-6 CAPLUS

CN Urea, N-[2-[bis(1-methylethyl)amino]ethyl]-N-[2-[[(phenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-90-0 CAPLUS

CN Urea, N-[2-(dimethylamino)ethyl]-N-[2-[[(1-naphthalenylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 862808-92-2 CAPLUS
CN Urea, N-[2-[[[(4-bromophenyl)amino]carbonyl]amino]ethyl]-N-[3-(4-methyl-1-piperazinyl)propyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862808-94-4 CAPLUS

CN Urea, N-[2-(1-pyrrolidinyl)ethyl]-N-[2-[[(6-quinolinylamino)carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862809-05-0 CAPLUS

CN Urea, N-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]ethyl]-N-[2-(dimethylamino)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 862809-09-4 CAPLUS

CN Urea, N-[2-[[2-(diethylamino)ethyl][[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]ethyl]-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2002:865481 CAPLUS
- DN 139:303935
- TI High-resolution reversed-phase high-performance liquid chromatography analysis of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate. [Erratum to document cited in CA127:78027]
- AU Weiss, Thomas; Bernhardt, Gunther; Buschauer, Armin; Jauch, Karl-Walter; Zirngibl, Hubert
- CS Dep. Surgery, Univ. Regensburg, Regensburg, D-93042, Germany
- SO Analytical Biochemistry (2002), 311(1), 100 CODEN: ANBCA2; ISSN: 0003-2697

PB Elsevier Science

DT Journal

LA English

AB In Figures 3, 5, and 7, the compound nos. for spermine 11 and the internal standard (IS) 1,7-diaminoheptane 12 were erroneously exchanged. In Table 3, the internal standard (IS) 1,7-diaminoheptane was designated compound 13 instead

of 12.

IT 191729-96-1P 191729-97-2P 191729-98-3P

191729-99-4P 191730-00-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (high-resolution reversed-phase HPLC anal. of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate (Erratum))

RN 191729-96-1 CAPLUS

CN Acetamide, N-[3-[[(6-quinolinylamino)carbonyl][4-[[(6-quinolinylamino)carbonyl]] (CA INDEX NAME)

RN 191729-97-2 CAPLUS

CN Acetamide, N-[4-[[(6-quinolinylamino)carbonyl][3-[[(6-quinolinylamino)carbonyl]amino]butyl]- (CA INDEX NAME)

RN 191729-98-3 CAPLUS

CN Urea, N'-6-quinolinyl-N-[4-[[(6-quinolinylamino)carbonyl]amino]butyl]-N-[3-[(6-quinolinylamino)carbonyl]amino]propyl]- (CA INDEX NAME)

RN 191729-99-4 CAPLUS

CN 2,7,11,15-Tetraazaheptadecanamide, 16-oxo-N-6-quinolinyl-7,11-bis[(6-quinolinylamino)carbonyl]- (CA INDEX NAME)

RN 191730-00-4 CAPLUS

CN 2,6,10,15-Tetraazahexadecanediamide, N1,N16-di-6-quinolinyl-6,10-bis[(6-quinolinylamino)carbonyl]- (CA INDEX NAME)

L4 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1997:342994 CAPLUS

DN 127:78027

OREF 127:14857a

TI High-resolution reversed-phase high-performance liquid chromatography analysis of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate

AU Weiss, Thomas; Bernhardt, Gunther; Buschauer, Armin; Jauch, Karl-Walter; Zirngibl, Hubert

CS Dep. Surgery, Univ. Regensburg, Regensburg, D-93042, Germany

SO Analytical Biochemistry (1997), 247(2), 294-304 CODEN: ANBCA2; ISSN: 0003-2697

PB Academic

DT Journal

LA English

AB A highly sensitive, accurate, and reproducible HPLC method for the determination

of all natural polyamines and their monoacetyl conjugates is described. The presented method is based on precolumn derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate (HSQC) followed by C18-HPLC separation using a ternary gradient and fluorescence detection ($\lambda Ex = 248$ nm, $\lambda Em = 398$ nm). The derivs. of the four main polyamines (putrescine, cadaverine, spermidine, and spermine) and the internal standard were synthesized on a preparative scale and characterized, especially with respect to their molar absorptivities and fluorescence quantum yields. The limits of detection of the highly stable derivs. ranged from 30 to 130 fmol (injection volume 10 μ l) for putrescine and N-acetylcadaverine, resp. (signal to noise ratio = 10), with excellent linearity within the range from 1 to 100 μ M. High reproducibility for both retention times and peak areas, with coeffs. of variation ranging from 0.14 to 0.88% and from 1.83 to 3.80%, resp., were achieved. Provided that deproteinization of the samples was carried out immediately, recoveries of the analytes from homogenates of pancreatic cancer xeno-grafts were high and reproducible. The optimized method was applied to the determination of the polyamine content of cultured pancreatic cancer cells and of tissue from colorectal adenocarcinoma, proving precise and reproducible quantification in these complex biol. matrixes.

IT 191729-96-1P 191729-97-2P 191729-98-3P 191729-99-4P 191730-00-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (high-resolution reversed-phase HPLC anal. of polyamines and their monoacetyl conjugates by fluorescence detection after derivatization with N-hydroxysuccinimidyl 6-quinolinyl carbamate)

RN 191729-96-1 CAPLUS

CN Acetamide, N-[3-[[(6-quinolinylamino)carbonyl][4-[[(6-quinolinylamino)carbonyl]amino]butyl]amino]propyl]- (CA INDEX NAME)

RN 191729-97-2 CAPLUS

CN Acetamide, N-[4-[[(6-quinolinylamino)carbonyl][3-[[(6-quinolinylamino)carbonyl]amino]butyl]- (CA INDEX NAME)

RN 191729-98-3 CAPLUS

CN Urea, N'-6-quinolinyl-N-[4-[[(6-quinolinylamino)carbonyl]amino]butyl]-N-[3-[[(6-quinolinylamino)carbonyl]amino]propyl]- (CA INDEX NAME)

RN 191729-99-4 CAPLUS

CN 2,7,11,15-Tetraazaheptadecanamide, 16-oxo-N-6-quinolinyl-7,11-bis[(6-quinolinylamino)carbonyl]- (CA INDEX NAME)

RN 191730-00-4 CAPLUS

CN 2,6,10,15-Tetraazahexadecanediamide, N1,N16-di-6-quinolinyl-6,10-bis[(6-quinolinylamino)carbonyl]- (CA INDEX NAME)

OSC.G 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1997:268152 CAPLUS

DN 127:11327

OREF 127:2213a,2216a

TI Liquid crystalline derivatives of oligoethylene-amines and -amino ethers with amide, ester, urea or urethane functions

AU Stebani, Uwe; Lattermann, Gunter; Wittenberg, Michael; Wendorff, Joachim Heinz

CS Makromolekulare Chemie I, Universitat Bayreuth, Bayreuth, D-95440, Germany

SO Journal of Materials Chemistry (1997), 7(4), 607-614 CODEN: JMACEP; ISSN: 0959-9428

Royal Society of Chemistry

PB Royal Socied DT Journal

LA English

AB The mesomorphism of diethylenetriamine and triethylenetetramine derivs., substituted with the 3,4-bis(decyloxy)benzoyl group ('two chain' substituent) via amide, ester, urea or urethane moieties, is described. Also, different examples of related linear and cyclic oligoethyleneamino ethers were studied and compared with the mesomorphism of the 1st group. Both lamellar smectic A and hexagonal columnar mesophases can be observed in linear compds., depending on the length of the linear unit. A cyclic derivative displays a cubic phase. The conclusion is emphasized that the mesomorphism of these classes of compds. is caused by microphase separation 190275-30-0P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(preparation and liquid crystal properties of)

RN 190275-30-0 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis[3,4-bis(decyloxy)phenyl]-5,8-bis[[[3,4-bis(decyloxy)phenyl]amino]carbonyl]- (CA INDEX NAME)

- (CH₂)₉-Me

OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1993:131352 CAPLUS

DN 118:131352

OREF 118:22591a,22594a

TI Antifoaming agent for foam control of waters containing proteins and its

IN Rasp, Christian

PA Bayer A.-G., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 4104869	A1	19920820	DE 1991-4104869	19910217
				DE 1991-4104869	19910217

AB Foaming in wastewaters, e.g., from slaughterhouses, containing 50 ppm to 0.5 weight% proteins, is prevented using a modified polyether (I), where R is II. A suitable agent is I where R1 = R2 = R4 = H, R3 = Me, R5 = n-Bu, p = q = 0, x = 21, y = 16, R6 = 2,4-toluylene, and R7 = C2H4.

IT 146349-56-6

RL: PROC (Process)

(antifoaming agent, for slaughterhouse wastewaters)

RN 146349-56-6 CAPLUS

CN Oxirane, methyl-, polymer with oxirane, ester with [3-[[[2-[[[5-[[(carboxyamino)carbonyl]amino]-2-methylphenyl]amino]carbonyl][2-[[[[3-(carboxyamino)-4-methylphenyl]amino]carbonyl]amino]ethyl]amino]carbonyl]amino]-

4-methylphenyl]carbamic acid (3:1), tributyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 177570-62-6 CMF C32 H38 N10 O10

PAGE 1-A

PAGE 2-A

0

CM 2

CRN 71-36-3 CMF C4 H10 O

 $_{\rm H_3C-CH_2-CH_2-CH_2-OH}$

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L4 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1993:101613 CAPLUS

DN 118:101613

OREF 118:17781a,17784a

TI Non-classical urea oligomers. Part XIV. Some new properties of copper(II) ion encircled by bis-branched oligomeric urea ligand: properties associated with catalysis for oxidative coupling of phenols

AU Araki, Takeo; Tanaka, N.; Hinokimori, T.; Hotta, K.; Tateishi, K.; Kubo, Y.; Yamaguchi, T.; Watanabe, K.; Fukuda, H.; Asa, H.

CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan

SO Journal of Molecular Catalysis (1992), 75(1), 21-40 CODEN: JMCADS; ISSN: 0304-5102

DT Journal

LA English

AB Bis-branched urea oligomers (B-urea) mainly composed of hexakis(N-acrylcarbamoyl)-[N3,N4-bis(ethylamino)]pentaethylenehexamine were obtained by the reaction of triethylenetetramine with 1,2-dibromoethane followed by treatment with PhNCO. Under neutral conditions the B-urea readily forms stable mononuclear Cu(II) complexes, e.g. I, in which a Cu(II) ion is almost fully surrounded by the B-urea ligand, as confirmed by magnetic susceptibility measurements. In the presence of oxygen, this Cu(II) complex (B-urea-Cu(II)) effectively catalyzes oxidative coupling of various substituted phenols, e.g. 2,6-di-tert-butyl-, 2,6-dimethyl-, and 2,6-di-tert-butyl-4-methylphenols. At the same time the Cu(II) ion is reduced to form the corresponding yellow B-urea-Cu(I) complex quant. The Cu(I) state is highly stable for storage in the solid state but can readily be reacted with oxygen in a reversible manner in solution

IT 144964-19-2 144976-66-9

RL: RCT (Reactant); RACT (Reactant or reagent)
 (complexation of, with copper(II))

RN 144964-19-2 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecanediamide, N1,N18-diphenyl-5,14-bis[(phenylamino)carbonyl]-8,11-bis[2-

[[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-B

$$\begin{array}{c} \text{O} \\ || \\ -\text{CH}_2-\text{NH-C-NHPh} \end{array}$$

RN 144976-66-9 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecanediamide, N1,N18-bis(4-methylphenyl)-5,14-bis[[(4-methylphenyl)amino]carbonyl]-8,11-bis[2-[[[(4-methylphenyl)amino]carbonyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-A

L4 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1993:39373 CAPLUS

DN 118:39373

OREF 118:7195a,7198a

TI Chemical modification of the antitumor antibiotic bleomycetin by C-end fragment

AU Andronnikova, G. P.; Lomakina, N. N.; Anisimova, T. M.; Usol'seva, S. V.; Zenkova, V. A.; Anoshina, G. M.; Bychkova, O. P.; Gold'berg, L. E.; Stepanova, E. S.

CS Urals Polytech. Inst., Ekaterinburg, Russia

SO Antibiotiki i Khimioterapiya (1992), 37(8), 24-7 CODEN: ANKHEW; ISSN: 0235-2990

DT Journal

LA Russian

AB Bleomycetin I [R = NH(CH2)3NH(CH2)4NH2], an antitumor antibiotic, was modified at the 3-[(4-aminobutyl)amino]propylamine (spermidine) fragment by acylation, carbamoylation, and reductive alkylation to give new semisynthetic derivs. Modifications involved the primary and secondary amino groups and gave N,N'-diacyl, N,N'-dicarbamoyl, and N,N'-dialkyl bleomycetins with lowered antibiotic toxicities.

IT 144764-23-8P 144764-25-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and cytotoxicity of)

RN 144764-23-8 CAPLUS

CN Bleomycinamide, N1-[3-[[(4-methylphenyl)amino]carbonyl][4-[[(4-methylphenyl)amino]carbonyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 144764-25-0 CAPLUS

CN Bleomycinamide, N1-[3-[[(phenylamino)thioxomethyl][4-[[(phenylamino)thioxomethyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 144764-25-0 CAPLUS

CN Bleomycinamide, N1-[3-[[(phenylamino)thioxomethyl][4-[[(phenylamino)thioxomethyl]amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

ANSWER 12 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN L4

1990:209795 CAPLUS ΑN

112:209795 DN

OREF 112:35243a,35246a

Preparation and copper(II)-complexing property of ΤI hexakis(N-phenylcarbamoyl)-(3N-ethylamino)pentaethylenehexamine. A new type of chelating compound

ΑU

Araki, Takeo; Kubo, Yasuo; Nomura, Yuzo Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Matsugasaki, 606, Japan CS

SO Chemistry Express (1990), 5(1), 17-20 CODEN: CHEXEU; ISSN: 0911-9566

DTJournal

LA English

AΒ Hexakis(N-phenylcarbamoyl)(3N-ethylamino)pentaethylenehexamine was prepared from Epomin-SP003 by the reaction with PhNCO and purified by column

chromatog. This singly branched chain compound formed a stable Cu(II) complex in contrast to the case of the linear chain analog. The main component of the starting oligoethylenimine was thus confirmed.

IT 126912-10-5DP, copper complex

RL: PRP (Properties); PREP (Preparation) (formation and electronic spectrum of)

RN 126912-10-5 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,14-tricarboxamide, 1,18-dioxo-N5,N8,N14-triphenyl-1,18-bis(phenylamino)-11-[2-[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-B

RN 126912-10-5 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,14-tricarboxamide, 1,18-dioxo-N5,N8,N14-triphenyl-1,18-bis(phenylamino)-11-[2-[[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

L4 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1990:177900 CAPLUS

DN 112:177900

OREF 112:30073a,30076a

TI Paramagnetic line-broadening of nitrogen-hydrogen signals in hexakis(N-phenylcarbamoyl)pentaethylenehexamine in the presence of copper(II) ions

AU Araki, Takeo; Kubo, Yasuo; Tsuchie, Shoji

CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan

SO Chemistry Express (1989), 4(11), 705-8 CODEN: CHEXEU; ISSN: 0911-9566

DT Journal

LA English

AB Paramagnetic 1H-NMR line-broadening of the NH signals in hexakis(N-phenylcarbamoyl)pentaethylenehexamine in the presence of Cu(II) ions indicates that the Cu ions interact more readily with the outer CO-NH groups than with the inner CO-NH groups.

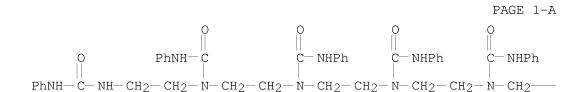
IT 126093-17-2

RL: PRP (Properties)

(NMR spectrum of, effect of copper ions on)

RN 126093-17-2 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide, 1,18-dioxo-N5,N8,N11,N14-tetraphenyl-1,18-bis(phenylamino)- (CA INDEX NAME)



PAGE 1-B

IT 122595-05-5 126552-70-3 126552-71-4
RL: PRP (Properties)
(attempted complexation of, with copper ions)

RN 122595-05-5 CAPLUS

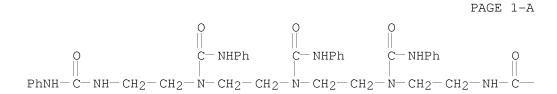
CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)

RN 126552-70-3 CAPLUS

CN Urea, N'-phenyl-N,N-bis[2-[[(phenylamino)carbonyl]amino]ethyl]- (CA INDEX NAME)

RN 126552-71-4 CAPLUS

CN 2,5,8,11,14-Pentaazapentadecanediamide, N1,N15-diphenyl-5,8,11-tris[(phenylamino)carbonyl]- (CA INDEX NAME)



PAGE 1-B

--- NHPh

IT 115269-92-6

RL: PRP (Properties)
 (complexation of, with copper ions)

RN 115269-92-6 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)- (CA INDEX NAME)

PAGE 1-B

L4 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1990:157650 CAPLUS

DN 112:157650

OREF 112:26643a,26646a

TI Nonclassical urea oligomers. XI. Presence of intramolecular hydrogen bonds in hexakis(N-phenylcarbamoyl)pentaethylenehexamine

AU Araki, Takeo; Kubo, Yasuo; Yasuda, Yohko

CS Dep. Polym. Sci. Eng., Kyoto Inst. Technol., Kyoto, 606, Japan

SO Chemistry Express (1989), 4(9), 605-8 CODEN: CHEXEU; ISSN: 0911-9566

DT Journal

LA English

AB The title compound (I) was treated with CF3CH2OH and the concentration-dependent

downfield shifts of the NH signals in the NMR spectrum were observed. The inner NH groups are bonded by intramol. H bonds and the outer NH groups contribute to intermol. H bonding; a helical conformation for I is suggested.

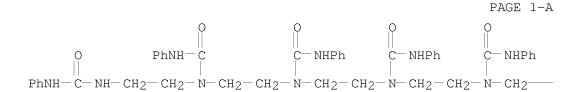
IT 126093-17-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation, NMR, and mol. structure of, hydrogen bonding in relation to)

RN 126093-17-2 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide, 1,18-dioxo-N5,N8,N11,N14-tetraphenyl-1,18-bis(phenylamino)- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1989:231353 CAPLUS

DN 110:231353

OREF 110:38343a,38346a

TI Oligomers of aziridines and $N-\beta$ -aziridinoethylamides

AU Kostyanovskii, R. G.; Leshchinskaya, V. P.; Ālekperov, R. K.; Kadorkina, G. K.; Shustova, L. L.; El'natanov, Yu. I.; Gromova, G. L.; Aliev, A. E.; Chervin, I. I.

CS Int. Khim. Fiz., Moscow, USSR

SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1988), (11), 2566-75 CODEN: IASKA6; ISSN: 0002-3353

DT Journal

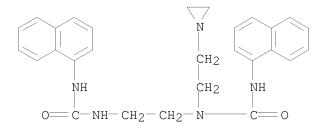
LA Russian

OS CASREACT 110:231353

- AB Aziridine dimers (e.g., N-acyl derivs. I) were prepared by treating aziridine with esters of strong organic acids, e.g., CF3CO2Et, EtO2CCO2Et, HCO2Et, MeCOCH2CO2Et. New N-acyl and carbamoyl derivs. of aziridine dimer and trimer were prepared Linear and branched isomers of aziridine tetramer, and a diastereomeric mixture of 2-methylaziridine dimer were isolated. An efficient regiospecific synthesis of 2,2-dimethylaziridine dimer and trimer was developed.
- IT 120626-70-2P

RN 120626-70-2 CAPLUS

CN Urea, N-[2-(1-aziridinyl)ethyl]-N'-1-naphthalenyl-N-[2-[[(1-naphthalenylamino)carbonyl]amino]ethyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1988:454269 CAPLUS

DN 109:54269

OREF 109:9143a,9146a

TI Site-selective derivatization of oligoethylenimines using five-membered-ring protection method

AU Araki, Takeo; Kubo, Yasuo; Gohbara, Shinji; Fujimoto, Tatsuya; Notsu,

Akio; Nakahara, Masaru; Isono, Toshihisa; Masuda, Noriko; Fukumoto, Kazumi

CS Fac. Sci., Shimane Univ., Matsue, 690, Japan

SO Macromolecules (1988), 21(7), 1995-2001 CODEN: MAMOBX; ISSN: 0024-9297

DT Journal

LA English

AB Application of modified Ganem's method was effective for derivatization of oligoethyleneimines (diethylenetriamine, triethylenetetramine, and pentaethylenehexamine) to site-selectively substituted products. The method involves protection of amino groups with aldehydes by formation of five-membered rings, resulting in the remaining unprotected NH groups ready for substitution. Thus, treating H2N(CH2)2NH(CH2)2NH2 with HCHO gave (imidazolidylethyl)amine I. The protective five-membered ring was readily deprotected to recover the amino groups after the necessary substitution reactions were carried out. This protecting method was applied to site-selective thiourea derivatizations and synthesis of completely linear heptaethyleneoctamine.

IT 115269-94-8P 115269-95-9P 115269-96-0P 115269-97-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and gel permeation chromatog. of)

RN 115269-94-8 CAPLUS

CN 2,5,8,11,14,17-Hexaazaoctadecane-5,8,11,14-tetracarboxamide, N5,N8,N11,N14-tetrakis(4-methylphenyl)-1,18-bis[(4-methylphenyl)amino]-1,18-dioxo- (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{NH} \\ \text{O} \\ \text{O} \\ \text{C} \\$$

PAGE 2-B

 $^{\sim}$ Me

RN 115269-95-9 CAPLUS
CN 2,5,8,11,14-Pentaazapentadecanediamide,
 N1,N15-bis(4-methylphenyl)-5,8,11-tris[[(4-methylphenyl)amino]carbonyl] (CA INDEX NAME)

RN 115269-96-0 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis(4-methylphenyl)-5,8-bis[[(4-methylphenyl)amino]carbonyl]- (CA INDEX NAME)

RN 115269-97-1 CAPLUS

CN Urea, N'-(4-methylphenyl)-N, N-bis[2-[[[(4-methylphenyl)amino]carbonyl]amino]ethyl]- (CA INDEX NAME)

IT 115269-91-5P 115269-92-6P

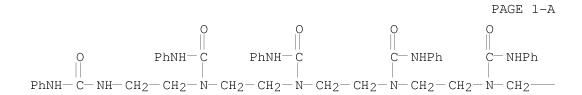
RN 115269-91-5 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, N5,N8,N11,N14,N17,N20-hexakis(4-methylphenyl)-1,24-bis[(4-methylphenyl)amino]-1,24-dioxo- (CA INDEX NAME)

PAGE 1-B

RN 115269-92-6 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)- (CA INDEX NAME)



L4 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1987:455796 CAPLUS

DN 107:55796

OREF 107:9215a,9218a

TI Application of carbon-13 NMR spectroscopy to study the biosynthesis of the quinolizidine alkaloids lupinine and sparteine

AU Rana, Jatinder; Robins, David J.

CS Dep. Chem., Univ. Glasgow, Glasgow, G12 8QQ, UK

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1986), (6), 1133-7 CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

AB The labeling patterns in (-)-sparteine and (-)-lupinine derived biosynthetically in Lupinus luteus from [1-amino-15N,1-13C]cadaverine dihydrochloride (I) were established by 13C NMR spectroscopy. Three units of I are incorporated to about the same extent into sparteine, and 2 13C-15N doublets are observed in the 13C{1H} NMR spectrum of sparteine, demonstrating that 2 of these cadaverine units are converted into the outer rings of sparteine in a specific fashion. Two cadaverine units are incorporated into lupinine and 1 13C-15N doublet is observed These results, and 14C-labeling expts. with 1,7,13-triazatridecane, indicate that a later C5-N-C5 intermediate with C2v symmetry is not involved in lupinine or sparteine biosynthesis.

IT 109314-18-3P

RN 109314-18-3 CAPLUS

CN Thiourea, N'-phenyl-N, N-bis[5-[[(phenylamino)thioxomethyl]amino]pentyl]-(CA INDEX NAME)

L4 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1986:505837 CAPLUS

DN 105:105837

OREF 105:17001a,17004a

TI Recording media

IN Haruta, Masahiro; Matsuda, Hiroshi; Munakata, Hirohide; Nishimura, Yukio

PA Canon K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF DТ Patent LA Japanese FAN.CNT 6 KIND DATE APPLICATION NO.

A 19851001 JP 1984-47186 PATENT NO. DATE _____ _____ JP 60192973 19840314 РΤ US 1987-27050 19870323
JP 1984-47183 A 19840314
JP 1984-47184 A 19840314
JP 1984-47185 A 19840314
JP 1984-47186 A 19840314
JP 1984-47187 A 19840314
JP 1984-47188 A 19840314
US 1985-710686 A1 19850312
US 1988-221638 19880720
JP 1984-47183 A 19840314
JP 1984-47184 A 19840314
JP 1984-47185 A 19840314
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JP 1984-47186 A 19840314 US 4818665 A 19890404 US 1987-27050 19870323 US 1985-710686 US 1988-221638 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 A US 5006446 19910409 JP 1984-47185 A 19840314 JP 1984-47186 A 19840314 JP 1984-47187 A 19840314 JP 1984-47188 A 19840314 US 1985-710686 B1 19850312 US 1987-27050 A3 19870323 PATENT FAMILY INFORMATION: FAN 1986:234362 PATENT NO. DATE APPLICATION NO. KIND DATE DATE 19851001 JP 1984-47185 19840314
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JP 1984-47183 A 19840314
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US 4818665 A 19890404 US 1987-27050 19870323
JP 1984-47183 A 19840314
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	US 5006446	A	19910409	US 1988-221638 JP 1984-47183 JP 1984-47184 JP 1984-47185 JP 1984-47186 JP 1984-47187 JP 1984-47188 US 1985-710686 US 1987-27050	A A A A A B1	19880720 19840314 19840314 19840314 19840314 19840314 19840314 19850312 19870323
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JP 1984-47183
                                                       A 19840314
                                                       A 19840314
                                     JP 1984-47184
                                     JP 1984-47185
                                                       A 19840314
                                     JP 1984-47186
                                                       A 19840314
                                                       A 19840314
                                     JP 1984-47187
                                     JP 1984-47188
                                                       A 19840314
                                    US 1985-710686
                                                       A1 19850312
US 5006446
                 Α
                         19910409
                                    US 1988-221638
                                                           19880720
                                     JP 1984-47183
                                                        A 19840314
                                    JP 1984-47184
                                                       A 19840314
                                    JP 1984-47185
                                                       A 19840314
                                    JP 1984-47186
                                                       A 19840314
                                    JP 1984-47187
                                                       A 19840314
                                     JP 1984-47188
                                                       A 19840314
                                     US 1985-710686
                                                       B1 19850312
                                     US 1987-27050
                                                       A3 19870323
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Recording media have a support and monomol. layers of a metal chelate and a free ligand stacked together singly or multiply or stacked monomol. layers of a mixture of the metal chelate and the free ligand. The media have high sensitivity to applied energy signals and give images with high resolution Thus, a CHC13 solution of a 1:1 mixture of ligand I and chelate II

mM concentration each) was spread on a 0.1 mM CdCl2 solution to form a mixed monomol. layer and transferred onto a glass plate. The process was repeated until 5 stacked monomol. layers were formed. Patternwise exposure of the material to UV light produced a red-purple image having a resolution of 1000 lines/mm.

IT 103781-94-8

RL: USES (Uses)

(photosensitive monomol. layers of metal chelate and, for optical recording materials and photoimaging compns.)

RN 103781-94-8 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 2-(2-hydroxyethyl)-N5,N8,N11,N14,N17,N20-hexakis(4-methylphenyl)-1,24-bis[(4-methylphenyl)amino]-1,24-dioxo- (CA INDEX NAME)

PAGE 1-B

L4 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1984:102457 CAPLUS

DN 100:102457

OREF 100:15549a,15552a

- TI Catalytic properties of synthetic linear oligomer-copper complexes in autoxidation of phenols
- AU Tsukube, Hiroshi; Maruyama, Kazuhiro; Araki, Takeo
- CS Dep. Chem., Okayama Univ., Okayama, 700, Japan
- SO Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1983), (10), 1485-90 CODEN: JCPKBH; ISSN: 0300-9580
- DT Journal
- LA English
- AB The catalytic properties of Cu complexes of intermediate-sized ligands in the autoxidn. of phenols were examined Complexes of CuCl2 with [CH2CH2N(CONHPh)]8, [CH2CH2N(CONHBu)]n and [CH2CH2N(CSNHPh)]8 were effective catalysis for the autoxidn. of 2,6-xylenol, giving high reaction rates and good coupling selectivity.
- IT 88936-58-7D, copper complexes RL: CAT (Catalyst use); USES (Uses)

(catalysts, for autoxidn. of phenols)

RN 88936-58-7 CAPLUS

CN 2,5,8,11-Tetraazadodecanedithioamide,

N1, N12-diphenyl-5, 8-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)

L4 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1982:118451 CAPLUS

DN 96:118451

OREF 96:19398h,19399a

 ${\tt TI}$ Isolation, separation, and analysis of polyamines via their N-phenylaminothiocarbonyl derivatives

AU Golding, Bernard T.; Nassereddin, Ishaq K.

CS Dep. Chem. Mol. Sci., University of Warwick, Coventry, CV4 7AL, UK

SO Journal of Chemical Research, Synopses (1981), (11), 342 CODEN: JRPSDC; ISSN: 0308-2342

DT Journal

LA English

AB Polyamines react rapidly with PhNCS in aqueous EtOH to form fully blocked N-phenylaminothiocarbonyl derivs. These derivs. are suitable for chromatog, separation and NMR spectroscopic anal. E.g., cells were obtained from an Escherichia coli culture, washed with aqueous NaCl and KCl, and extracted

with aqueous TCA. The extract was filtered, extracted with Et20, and the aqueous layer

kept. The pH of the aqueous layer was adjusted to 9 with aqueous Na2CO3; PhNCS in

EtOH was added, and the mixture stirred 1 h at room temperature $\ensuremath{\mathsf{Extraction}}$ with $\ensuremath{\mathsf{CH2C12}}$

gave a residue containing mainly the phenylaminothiocarbonyl derivs. of putrescine and spermidine, which were separated by preparative TLC.

IT 81065-67-0P 81065-68-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)

RN 81065-67-0 CAPLUS

CN Thiourea, N'-phenyl-N-[4-[[(phenylamino)thioxomethyl]amino]butyl]-N-[3-[(phenylamino)thioxomethyl]amino]propyl]- (CA INDEX NAME)

RN 81065-68-1 CAPLUS

CN 2,6,11,15-Tetraazahexadecanedithioamide, N1,N16-diphenyl-6,11-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)

L4 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1981:527566 CAPLUS

DN 95:127566

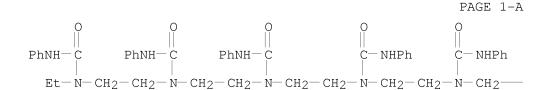
OREF 95:21291a,21294a

- TI Highly selective membrane transport of copper(II) ion by synthetic linear oligomer carriers
- AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo
- CS Dep. Chem., Kyoto Univ., Kyoto, 606, Japan
- SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1981), (7), 1486-91 CODEN: JCDTBI; ISSN: 0300-9246
- DT Journal
- LA English
- AB A new class of synthetic linear oligomeric carriers having urea or thiourea units exts. and transports transition metal ions with high selectivity. The rates and specificities in this transport system are dependent on the carrier structure, the nature of the cotransported anions, and other additives. The best carrier, the urea-containing oligomer [CH2CH2N(CONHPh)]8, shows completely selective transport of Cu2+ through a CH2Cl2 liquid membrane between aqueous phases, and is thus a chemical analog of biol. Cu transport.
- IT 74010-59-6

RL: BIOL (Biological study)

(metal ion transport by, through liquid membrane)

- RN 74010-59-6 CAPLUS
- CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 2-ethyl-1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)-(CA INDEX NAME)



PAGE 1-B

OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L4 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1981:132566 CAPLUS

DN 94:132566

OREF 94:21563a,21566a

TI An artificial oligomer carrier for transport of organic substrates

AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo

CS Dep. Chem., Kyoto Univ., Kyoto, 606, Japan

SO Journal of the Chemical Society, Chemical Communications (1980), (24), 1222-4
CODEN: JCCCAT; ISSN: 0022-4936

DT Journal

LA English

AB A new type of lipophilic host oligomer H[CH2CH2N(CONHPh)]8H (I), prepared by ring-opening oligomerization of 1-(N-phenylcarbamoyl)aziridine, efficiently transported biol. important adenine, amino acid, and catechol amine salts as well as simple amine derivs. through artificial membranes. The extraction and transport of organic cation salts by I was compared with dibenzo-18-crown-6 (II). I showed a high specificity towards aromatic amines whereas II extracted and transported both aliphatic and aromatic amines.

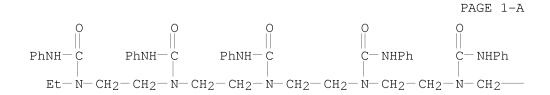
IT 74010-59-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, and organic cation salt extraction and transport by)

RN 74010-59-6 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 2-ethyl-1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)-(CA INDEX NAME)



PAGE 1-B

L4 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1980:421127 CAPLUS

DN 93:21127

OREF 93:3543a,3546a

TI New membrane carrier for selective transport of metal ions

AU Maruyama, Kazuhiro; Tsukube, Hiroshi; Araki, Takeo

CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan

SO Journal of the American Chemical Society (1980), 102(9), 3246-7

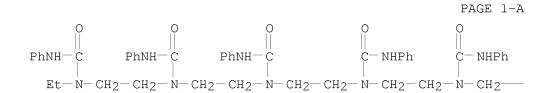
CODEN: JACSAT; ISSN: 0002-7863

- DT Journal
- LA English
- AB A selective membrane system containing a new class of synthetic oligomers, I, II, and III, as mobile carriers is described. This membrane system transported Cu (II) with excellent selectivity and high efficiency, and provided a chemical analog to biol. facilitated transport.
- IT 74010-59-6 74010-60-9

RL: BIOL (Biological study)

(as membrane carrier, for cation transport)

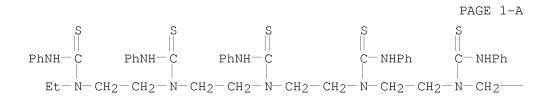
- RN 74010-59-6 CAPLUS
- CN 2,5,8,11,14,17,20,23-Octaazatetracosane-5,8,11,14,17,20-hexacarboxamide, 2-ethyl-1,24-dioxo-N5,N8,N11,N14,N17,N20-hexaphenyl-1,24-bis(phenylamino)-(CA INDEX NAME)



PAGE 1-B

RN 74010-60-9 CAPLUS

CN 2,5,8,11,14,17,20,23-Octaazapentacosane-5,8,11,14,17,20,23-heptacarbothioamide, N,N',N'',N''',N'''',N''''-heptaphenyl-1-(phenylamino)-1-thioxo-(9CI) (CA INDEX NAME)



PAGE 1-B

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L4 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1976:45964 CAPLUS

DN 84:45964

OREF 84:7553a,7556a

TI Polythioureas to inhibit ozone fading of dyed polyamides

IN Wells, Rodney Lee; Lofquist, Robert A.; Lazarus, Stanley D.

PA Allied Chemical Corp., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 3917449	A	19751104	US 1974-441595	19740211
				US 1974-441595	19740211

AB Ozone [57898-00-7] fading of polyamide fibers dyed with disperse or cationic dyes was reduced by coating the fibers with polythioureas prepared by treating alkyl isothiocyanates with primary or secondary amines or polyamines such as dimer diamine. Thus, nylon 6 yarn was knitted into sleeves which were sprayed with D(NHHCSNHCH2H:CH2]2 (D is a C36 hydrocarbon residue of a dimer acid) to provide 1.1% add-on and dyed with C. I. Disperse Yellow 3 and C. I. Disperse Blue 7. When the dyed sleeves were exposed to 3 cycles of O3 in an atmospheric containing 0.2 ppm O3 at 104°F and relative humidity .apprx.90%, the fading was much smaller than that of a control containing no polythiourea. The lightfastness, determined

by exposure to a xenon lamp at 145° , was 60 hr compared to 40 hr for the untreated control.

IT 57898-07-4

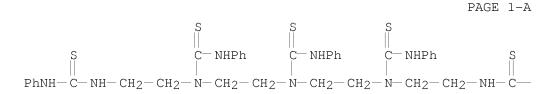
RL: USES (Uses)

(ozone fading prevention by, of cationic and disperse dyes on polyamide fibers)

RN 57898-07-4 CAPLUS

CN 2,5,8,11,14-Pentaazapentadecanedithioamide,

N1, N15-diphenyl-5, 8, 11-tris[(phenylamino)thioxomethyl]- (CA INDEX NAME)



PAGE 1-B

— NHPh

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N-[2-(2-pyridyl)ethyl]-N, N'-dicarbanilidotetramethylenediamine, 94.2, -
(m. 156^\circ), -; N-[2-(2-pyridyl)ethyl]hexamethylenediamine (I), 45.3,
91-3°/0.002, 1.5160; N-[2-(2-pyri
dyl)ethyl]-N'-acetylhexamethylenediamine, 38.2, 118°/0.002 1.5038
(insol. in water); N-[2-(2-pyridyl)ethyl)-N,N'-
diacetylhexamethylenediamine, 43.4, 143°/0.002, 1.5192 (insol. in
water); N-[2-(2-pyridyl)ethyl]-N,N',N'-triacetylhexamethylenediamine,
37.7, 205^{\circ}/0.02, 1.5230 (no solubility given);
N-[2-(2-pyridyl)] - N'-(\beta-hydroxyethyl) hexamethylenediamine, 47,
125°/0.01, 1.5168 (no solubility given);
N-[2-(2-pyridyl)ethyl]N',N'-bis(\beta-hydroxyethyl)hexamethylenediamine,
50, 166-8°/0.004, 1.5101;
1-[\beta-(2-pyridyl)] ethylamino-1-6-N-morpholino-n-hexane, 32,
110^{\circ}/1, 1.5026 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N,N',N'-tris(\beta-
hydroxyethyl)hexamethylenediamine, 60, 186°/0.01, 1.5000;
N-[2-(2-pyridyl)] octamethylenediamine, 46.8, 113°/0.002,
1.5100; N-[2-(2-pyridyl)ethyl]-N'-acetyloctamethylenediamine, 40,
125^{\circ}/0.001, 1.5027 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N, N'-diacetyloctamethylenediamine, 37,
165°/0.002, 1.5126; N-[2-(2-pyridyl)ethyl)-N,N',N'-
triacetyloctamethylenediamine, 61, 208°/0.001, 1.5216 (no solubility
given); N-[2-(2-pyridyl)ethyl]-N'-(\beta-
hydroxyethyl)octamethylenediamine, 49, 126°/0.001, 1.5023;
N-[2-(2-pyridyl)ethyl]-N, N'-bis(\beta-hydroxyethyl)octamethylenediamine,
40.4, 172°/0.02, 1.5158; N,N-bis[2-(2-
pyridyl)ethyl]ethylenediamine, 4.7, 120^{\circ}/0.004, 1.5426 (no solubility
given); N,N-bis[2-(2-pyridyl)ethyl]-N'-acetylethylenediamine, 37,
138-40^{\circ}/0.003, 1.5464 (insol. in water);
N, N-bis[2-(2-pyridyl)ethyl]-N, N'-diacetylethylenediamine, 25,
156^{\circ}/0.003, 1.5410 (no solubility given);
N, N-bis[2-(2-pyridy1)ethy1]-N-(2-benzoyloxyethy1)amine, 32.5, - (m.
172°), -; N,N-bis [2-(2-pyridyl)ethyl] tetramethylenediamine, 1.76,
128°/0.001, 1.5368; N,N-bis[2-(2-
pyridyl)ethyl]hexamethylenediamine, 14.3, 136°/0.002, 1.5216;
N, N-bis[2-(2-pyridyl)ethyl]-N'-acetylhexamethylenediamine, 31,
143°/0.001, 1.5142; N,N-bis[2-(2-pyridyl)ethyl]-N',N'-
diacetylhexamethylenediamine, 25, 163°/0.002, 1.5236;
N, N-bis[2-(2-piperidyl)ethyl]hexamethylenediamine, 68.3,
136°/0.002, 1.5216; N,N-bis[2-(2-pyridyl)ethyl]bis(\beta-
hydroxyethyl)hexamethylenediamine, 53, 160°/0.005, 1.5074,
N, N-bis[2-(2-pyridyl)ethyl)] octamethylenediamine, 13.6, 148°/0.001,
1.5246; N,N,N'-tris[2-(2-pyridyl)ethyl]ethylenediamine, 27.4,
148°/0.01, 1.5544; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
acetylethylenediamine, 58.8, 180°/0.01, 1.5361 (no solubility given);
N, N, N'-tris[2-(2-pyridyl)ethyl]-N'ethoxymethylethylenediamine, 13.9,
90-5°/0.02, 1.5563; N-[2-(2-pyridyl)ethyl]-N,N'-bis[\beta-(2-
pyridyl)-\gamma-hydroxypropyl]-N'-ethoxymethylethylenediamine, 56.3,
168^{\circ}/0.001, 1.5642 (no solubility given);
N-[2-(2-pyridyl)ethyl]-N, N'-bis[\beta-(2-pyridyl)allyl]-N'-
ethoxymethylethylenediamine, 43.2, -, 1.5667 (no solubility given);
N, N, N'-tris [2-(2-pyridy1)-\beta, \beta-bis (hydroxymethy1) = thy1]-N'-
ethoxymethylethylenediamine, 70.5, -, 1.5720 (no solubility given);
N, N, N'-tris[2-(2-pyridyl)ethyl)tetramethylenediamine, 26.6,
156°/0.001, 1.5487; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
acetyltetramethylenediamine, 78, 162°/0.001, 1.5316;
N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-(\beta-
cyanoethyl)tetramethylenediamine, 61.7, 158°/0.02, 1.5318;
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N, N, N'-tris[2-(2-pyridyl)ethyl]hexamethylenediamine, 27.1,
     163°/0.001, 1.5340; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
     acetylhexamethylenediamine, 86.3, 175°/0.005, 1.5348;
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-(\beta-
     hydroxyethyl)hexamethylenediamine, 72, 139°/0.001, 1.5191;
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-(cyanoethyl)hexamethylenediamine, 53.5,
     193°/0.08, 1.5020 (no solubility given);
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N-(\gamma-
     aminopropyl)hexamethylenediamine, 79.5, 152°/0.002, 1.5175 (no
     solubility given); N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-(2-
     carbamoylethyl)hexamethylenediamine, 39, - (m. 342°), -;
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-carbanilidohexamethylenediamine, 79, -
     (m. 134°), -; N,N,N'-tris[2-(2-pyridyl)ethyl]-N'-
     (thiocarbanilido) hexamethylenediamine, 68.6, - (m. 85°), -;
     N, N, N'-tris[2-(2-pyridy1)ethy1]-N'-propen-2-ylhexamethylenediamine, 18.3,
     95-100^{\circ}/0.001, 1.5118 (no solubility given);
     N, N, N'-tris[2-(2-pyridyl)ethyl]octamethylenediamine, 52.9,
     185^{\circ}/0.001, 1.5380 (no solubility given);
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-acetyloctamethylenediamine, 59.4,
     193^{\circ}/0.001, 1.5219 (no solubility given);
     N, N, N'-tris[2-(2-pyridyl)ethyl]-N'-(\beta-
     cyanoethyl) octamethylenediamine, 66.4, 162°/0.02, 1.5073;
     N, N, N', N'-tetrakis[2-(2-pyridyl)ethyl]ethylenediamine, 5,
     183^{\circ}/0.01, 1.5616 (no solubility given);
     N, N, N', N'-tetrakis[2-(2-pyridyl)ethyl]tetramethylenediamine, 2,
     183-5^{\circ}/0.001, 1.5546 (no solubility given);
     N,N,N',N'-tetrakis[2-(2-pyridyl)ethyl] hexamethylenediamine, 2.8,
     220^{\circ}/0.02, 1.5452 (no solubility given);
     N, N, N', N'-tetrakis[2-(2-pyridyl)ethyl]octamethylenediamine, 2.55,
     225^{\circ}/0.001, 1.5463 (no solubility given).
ΙT
     102218-88-2P, Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-ethylenebis[3-
     phenyl- 103734-40-3P, Urea,
     1-[2-(2-pyridyl)ethyl]-1,1'-tetramethylenebis[3-phenyl-
     RL: PREP (Preparation)
        (preparation of)
RN
     102218-88-2 CAPLUS
CN
     Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-ethylenebis[3-phenyl-(7CI) (CA INDEX)]
     NAME)
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RN 103734-40-3 CAPLUS
CN Urea, 1-[2-(2-pyridyl)ethyl]-1,1'-tetramethylenebis[3-phenyl- (7CI) (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1958:92326 CAPLUS

DN 52:92326

OREF 52:16185d-e

TI Reaction of free radicals in solutions. VII. Role of activators in the process of decomposition of triazenes and in initiation of polymerization

AU Andakuskin, V. Ya.; Dolgoplosk, B. A.; Radchenko, I. I.

SO Zhurnal Obshchei Khimii (1956), 26, 3789-95 CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

LA English

AB See C.A. 51, 9511g.

RN 108515-69-1 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-di-1-naphthalenyl-5,8-bis[(1-naphthalenylamino)carbonyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{NH} \\ \text{C} = \text{O} \\ \text{NH} \\ \text{N} = \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} = \text{O} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{C} = \text{C} = \text{C} + \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text{C} = \text{C} = \text{C} = \text{C} = \text{C} = \text{C} \\ \text{C} = \text$$

RN 108992-90-1 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis([1,1'-biphenyl]-2-yl)-5,8-bis[([1,1'-biphenyl]-2-ylamino)carbonyl]- (CA INDEX NAME)

RN 122595-05-5 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)

L4 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1958:92325 CAPLUS

DN 52:92325

OREF 52:16185b-d

TI Tetracarbamyl derivatives of 1,2-bis(2-aminoethyl)ethylenediamine

AU Neville, Roy G.

CS Fine Chemicals, Inc., Seattle, WA

SO Journal of Organic Chemistry (1958), 23, 296-7 CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA Unavailable

AB (CH2)2[NH(CH2)2NH2]2, (I) was fractionally distilled and the liquid, b20 157°, collected and stored in brown bottles. The following general method for preparing [CH2N(CONHR)(CH2)2NHCONHR]2 (II) was as follows. The isocyanate (0.04 mole) was added cautiously to 1.46 g. I in 10-20 ml. ice-cold CHCl3 (strongly exothermic reaction) and the temperature maintained below 30°, on cooling the crystalline derivative filtered off, washed, dried, and recrystd. from iso-PrOH to give II. When 1:2 or 3:4 molar ratios of I and toluene 2,4-diisocyanate or toluene 2,4,6-triisocyanate were used the products were viscous polymers. The following II were thus

prepared (R, % yield, and m.p. given): allyl, 97, 211°; iso-Pr, 96, 245-7° (decomposition); Bu, 98, 216-17°; cyclohexyl, 100, 246-7° (decomposition); Ph, 100, 237-8°; Me(CH2)7, 98, 97-8°; dodecyl, 96, 170-1°; octadecyl, 95, 162°; α -C10H7, 98, 182°; β -C10H7, 92, 222°. The lower-member products were crystalline whereas the higher- or long-chain derivs. were waxy solids easily soluble in alc. 108515-69-1P, Urea, 1,1'-ethylenebis[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1-[2-[3-(1-naphthyl)-1ΙT naphthyl)ureidolethyl]- 108992-90-1P, Urea, 1,1'-ethylenebis[3-(2-biphenylyl)-1-[2-[3-(2-biphenylyl)ureido]ethyl]-122595-05-5P, Urea, 1,1'-ethylenebis[3-phenyl-1-[2-(3phenylureido)ethyl]-RL: PREP (Preparation) (preparation of) RN 108515-69-1 CAPLUS CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-di-1-naphthalenyl-5,8-bis[(1naphthalenylamino)carbonyl] - (CA INDEX NAME)

RN 108992-90-1 CAPLUS
CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-bis([1,1'-biphenyl]-2-yl)-5,8-bis[([1,1'-biphenyl]-2-ylamino)carbonyl]- (CA INDEX NAME)

RN 122595-05-5 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8bis[(phenylamino)carbonyl]- (CA INDEX NAME)

L4 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1957:62160 CAPLUS

DN 51:62160

OREF 51:11268b-i,11269a-i,11270a-f

TI Preparation and bacteriostatic activity of substituted ureas

AU Beaver, David J.; Roman, Daniel P.; Stoffel, Paul J.

CS Monsanto Chem. Co., St. Louis, MO

SO Journal of the American Chemical Society (1957), 79, 1236-45 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

AB cf. C.A. 49, 924b. The preparation and in vitro bacteriostatic activity of some ureas, carbanilides, and related compds. against Micrococcus pyrogenes var. aureus are described. The bacteriostatic properties of ureas were remarkably specific in that activity was greatly enhanced or completely lost with slight changes in chemical structure. Activity is drastically reduced by o-substitution regardless of the electronic character of the substituent. Thioureas were invariably less effective than similarly substituted ureas. Bromocarbanilides were less active than the Cl compds. in both ureas and thioureas. Procedure A: PhNCO (11.9 g.) in 50 cc. Et2O added dropwise to 16.2 g. 3,4-Cl2C6H3NH2 (I) in 50 cc. Et2O, the mixture held 2 hrs., and filtered yielded 3,4-dichlorocarbanilide. In the subprocedures the following solvents were used: A2, Skellysolve; A3, C6H6; A4, Me2CO; A5, absolute EtOH; A6, none; A7, none, 4 hrs. at 90°. Procedure B: 3,4-Cl2C6H3NCS (20.4 g.) and 16.2 g. I in 75 cc.

absolute EtOH refluxed 1 hr. yielded 3,3',4,4'-tetrachlorothiocarbanilide. Procedure C: PhNCO (11.9 g.) in 400 cc. Et2O at 20° treated with anhydrous NH3 yielded phenylurea. Procedure D: 2-C10H7NH2 (60.0 g.) and 24.0 g. urea heated to 160° and held there 3 hrs. yielded 1,3-di-2-naphthylurea. Procedure E: Cyclohexylamine (60.0 g.) in 800 cc. PhMe treated at 100° with COC12 yielded 1,3-dicyclohexylurea. For compds. of the type RNHC(:X)NHR', R, X, R', procedure, % yield, and m.p. are: H, O, 2-C10H7, C, 96.8, 212° (decomposition); H, O, 4-biphenylyl, C, 97.0, 209° (decomposition); 1-C10H7, O, 1-C10H7, D, 49.8, 295-6°; 2-C10H7, O, 2-C10H7, D, 86.7, 305-6°; 2-C10H7, O, CH2CH2CH2OMe, A, 80.0, 142.5-3.0°; 1-C10H7, O, cyclohexyl, A, 100.0, 237.0-8.0°; 2-C10H7, O, dicyclohexyl, A, 99.3, 177.3-7.8°; cyclohexyl, O, cyclohexyl, E, 30.2, 226.0-7.0°; dicyclohexyl, O, Et, A, 87.4, 146.8-7.5°; dicyclohexyl, O, dicyclohexyl, E, 36.5, 81.0-1.7°; cyclohexyl, S, Ph, A5, 91.5, 150.1-50.9°; cyclohexyl, S, 4-C6H4OEt, B, 74.5, 122.2-3.0°; cyclohexyl, S, 4-Me2NC6H4, B, 91.0, 127.0-7.8°; cyclohexy], S, 1-C10H7, B, 74.2, 141.8-2.5°; cyclohexyl, S, dicyclohexyl, B, 49.2, 103.2-3.6°; Ph, S, 4-Me2NC6H4, B, 84.2, 154.4-4.8°; Ph, S, 2-C10H7, B, 83.6, 158.2-9.0°; Ph, S, dicyclohexyl, B, 63.7, 86.5-7.3°; Ph, S, 4-C6H4OEt, A5, 89.8, 133.9-4.3°; 3,4-Br2C6H3, S, 4-BrC6H4, A7, 47.5, 125.0-6.1°. For RC6H4NHCONR1R2, R, R1, R2, procedure, % yield, and m.p. are: H, H, H, C, 61.5, 148.5-9.0°; H, H, CH2CH2CH2NEt2, A6, 100, 69.5-70.0°; H, H, CH2CH2CH2NHCHMe2, A2, 58.0, 143.7-4.2°; H, H, CH2CH2CH2OMe, A7, 100.0, 87.5-8.2°; H, H, cyclohexyl, A7, 97.3, 186.3-7.1°; H, H, 2-C10H7, A5, 73.3, 233.0-4.0°; H, cyclohexyl, cyclohexyl, A, 79.4, 180.3-1.3°; H, allyl, allyl, A2, 100.0, 65.5-6.0°; H, PhNHCONHCH2CH2CH2, PhNHCONHCH2CH2CH2, A6, 100, 132° (decomposition); H, Bu, Bu, A6, 98.6, 82.7-3.0°; H, heptyl, heptyl, A, 76.0, -; H, 2-ethylhexyl, 2-ethylhexyl, A7, 93.7, -; H, Ph, Ph, A7, 86.8, 136.0-6.6°; 2-Me, H, cyclohexyl, A, 95.1, $196.1-6.5^{\circ}$; 2-Me, cyclohexyl, cyclohexyl, A, 86.0, 142.2-2.8°; 4-Me, H, cyclohexyl, A, 100.0, 205.2-5.8°; 4-Me, cyclohexyl, cyclohexyl, A, 91.5, 173.4-3.7°; 2-MeO, cyclohexyl, cyclohexyl, A, 100.0, 155.3-6.0°; 2-EtO, H, CH2CH2CH2OMe, A6, 78.0, 86.6-7.2°; 2-EtO, H, 2-C10H7, A, 71.0, 177.5-8.2°; 2-EtO, cyclohexyl, cyclohexyl, A, 65.2, 99.8-100.4°; 4-EtO, H, Et, A, 85.3, 151.9-2.4°; 4-EtO, H, 1-C10H7, A, 97.6, 238.0-9.0°; 4-EtO, H, 2-C10H7, A, 99.3, 237.4-8.0°; 4-EtO, H, cyclohexyl, A, 95.6, 182.6-3.0°; 4-EtO, cyclohexyl, cyclohexyl, A, 91.8, 149.6-50.2°; dodecyl, cyclohexyl, cyclohexyl, A2, 100.0, -; 4-Me2N, 1-C10H7, H, A, 96.0, 227.5-8.5°; 4-Me2N, 2-C10H7, H, A, 91.3, 252-3°; 2-Ph, H, Et, A, 88.0, 114.6-15.2°; 2-Ph, cyclohexyl, cyclohexyl, A, 100, 110.0-10.7°; 2-Ph, H, CH2CH2CH2NEt2, A6, 100.0, 76.4-7.0°; 4-Cl, formyl, 2,4-Cl2C6H3, A7, 85.3, 118.5-19.1°; 4-Cl, formyl, 3,4-C12C6H3, A7, 63.0, 122.5-3.5°; 4-C1, allyl, 3,4-C12C6H3, A2, 87.2, 151.2-2.0°; 2-MeO, formyl, 2,5-Cl2C6H3, A7, 71.0, 152.5-3.0°. For compds. of the type RC6H4NHCONHC6H4R', R, R' (all procedure A except as noted), % yield, and m.p. are: H, 2-MeO, 84.3, 146.2-6.8°; H, 2-EtO, 94.4, 173.8-4.2°; H, 4-EtO, 100.0, 188.2-8.8°; H, 2-Et, 61.2, 184.9-5.5°; H, 4-Me2N, 94.0, 208.0-8.8°; H, 4-Et2N, 88.8, 178.7-9.3°; H, 2-Ph, 95.7, 173.0-3.6°; H, 4-Ph, 85.5, 240-1°; H, 4-H2N, 78.5, above 400°; H, 4-PhNH, 98.2, 212.8-13.8°; H, 4-Cl, 95.0, 250-1°; 2-MeO, 2,4-Cl2, 99.5, 222.3-3.0°; 4-MeO, 2,4-Cl2, 58.0, 230.0-30.5°; 2-EtO, 4-EtO, 65.2, 146.4-7.0°; 4-EtO,

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2-Me, 84.0, 202.0-2.4°; 4-EtO, 4-Me, 100.0, 220.4-1.0°;
4-EtO, 4-Me2N, 91.1, 211.8-12.2°; 4-EtO, dodecyl, A2, 100.0, -;
4-EtO, 2-Ph, 95.8, 194.8-5.4°; 2-Ph, 4-PhNH, 86.8,
155.8-6.2°; 2-Ph, 2-Ph, 74.0, 182.2-2.8°; 4-Ph, 4-Ph, 76.5,
312° (decomposition); 4-Cl, 4-Cl, 98.0, 315-19°; 4-Cl, 2,4-Cl2,
98.0, 253.0-3.8°; 4-Cl, 2,5-Cl2, 83.0, 261.5-2.5°; 3-Cl,
3,4-Br2, 94.0, 208-5-9.0°; 2,4-Cl2, 2,4-Cl2, 97.5, 261-3°.
For 3,4-C12C6H3NHCONRR', R, R' (all procedure A except as noted), % yield,
and m.p. are: H, H, C, 93.7, 155.6-6.3°; H, Et, 100.0,
179.5-80.1°; H, tert-octyl, 100.0, 145.8.6°; H,
cyclohexyl, 100.0, 188.0-8.7^{\circ}; H, 1-C10H7, 97.0, 265-6^{\circ};
H, 2-C10H7, 97.2, 267-8°; H, CH2CH(OH)Me, 100, 152.0-2.8°;
H, CH2CH2CH2OH, 98.8, 126.5-8.0°; H, tetrahydrofurfuryl, 100.0,
144.1-4.9°; Et, 4-ClC6H4, 77.0, 116.0-6.8°; allyl, allyl,
A2, 100.0, 62.5-3.5°; allyl, iso-Pr, 93.4, 84.0-4.5°;
CH2CH2OH, CH2CH2OH, 65.0, 156.8-7.6°; CH2:CC1CH2, CH2:CC1CH2, 100, 100.7-1.4°; CH2:CC1CH2, iso-Pr, 100, 84.7-5.2; CH2:CC1CH2, tert-Bu,
100.0, 93.9-5.0°; CHC1:CHCH2, CHC1:CHCH2, 100.0, 156.0-6.6°;
CH2:CC1CH2, CH2CH2CH2OMe, A2, 100, -; CH2:CC1CH2, Ph, A7, 92.9,
118.7-9.4°; H, CHCl:CClCH2, 61.2, 105.1-5.9°; Bu, Ph, 96.5,
98.5-9.4°; CH2CH2CN, Ph, 89.3, 114.7-15.5°; iso-Pr,
MeC.tplbond.C, 71.1, 84.4-5.1°; Ph, Ph, 39.5, 148.3-9.1°; cyclohexyl, cyclohexyl, 98.0, 177.6-8.4°; cyclohexyl, MeCH:CClCH2,
88.7, 160.4-60.8°; allyl, 4-C6H4OEt, 100, -; allyl, 3,4-C12C6H3,
A2, 87.3, 116.8-17.5°; MeC.tplbond.C, 3,4-Cl2C6H3, 69.0,
145.2-6.0°; Bu, Ph, 96.5, 98.5-9.4°; H, 2-thiazolyl, A4,
99.0, 225° (decomposition). For 3,4-Cl2C6H3NHCONHC6H4R, R, procedure (A
unless otherwise noted), % yield, and m.p. are: H, 100, 217.2-7.7°;
4-Me, 100.0, 258.0-9.0°; 2-MeO, 95.2, 173.8-4.3°; 4-MeO,
93.5, 233.1-4.0°; 4-Me2N, 95.0, 229.6-30.4°; 4-H2N, A3,
96.0, above 360°; dodecyl, A7, 98.0, -; 2-Ph, 91.6, 183.3-4.1;
4-Ph, 84.5, 233.0-4.0°; 2-Cl, 87.0, 220.0-20.6°; 3-Cl, 91.5,
210.7-11.3°; 4-Cl, 88.0, 255.2-56.2°; 2,4-Cl2, 97.3,
238.5-9.2°; 2,5-C12, 94.2, 242.2-2.6°; 3,4-C12, 100.0,
281-2°; 3,4,5-Cl3, 100.0, 308-10°; 3-Cl-4-HO, 95.4,
237.4-8.0°; 3,5-C12-4-HO, 92.4, 272-3°; 3-Br, 100.0,
208.5-9.2°; 4-PhNH, 100, 208.8-9.5°; 4-HO, A3, 82.5,
213.8-14.5°; 4-NO2, 95.3, 294-5°; 4-sulfamyl, A4, 83.6,
258.5-9.5°; 4-(2-thiazolesulfamyl), A4, 82.8, 271-2°;
4-(2-pyrimidinesulfamyl), A4, 79.0, 290° (decomposition). For
RC6H4NHC:XR', R, X, R', procedure, % yield, and m.p. are; H, O,
morpholino, A, 74.5, 159.3-60.0°; H, S, morpholino, B, 72.6,
132.6-3.4°; H, O, 2-methyl-1-piperidyl, A, 94.5,
115.4-16.0°; H, O, 1,2-dihydro-2,2,4-trimethyl-1-quinolyl, A,
71.0, 125.5-6.2°; H, O, 1,2-dihydro-6-ethoxy-2,2,4-trimethyl-1-
quinolyl, A, 94.2, 146.6-7.0°; H, O,
1,2-dihydro-6-phenyl-2,2,4-trimethyl-1-quinolyl, A, 40.5,
148.0-9.1°; 4-MeO, O, morpholino, A2, 95.7, 124.5-5.0°;
2-C1, O, morpholino, A2, 93.8, 132.2-2.8°; 3-C1, O, morpholino, A2,
98.3, 129.7-30.3°; 4-Cl, O, 4-morpholino, A2, 91.4,
200.8-1.4°; 3,4-Cl2, O, morpholino, A, 90.0, 157.1-7.8°;
3,4-Cl2, S, morpholino, B, 96.8, 197.5-8.1°; 3,4-Cl2, O,
1-piperidyl, A, 100.0, 175.0-5.8°; 3,4-Cl2, 0,
2-methyl-1-piperidyl, A2, 97.5, 171.4-1.9°; 3,4-Cl2, O, 3-methyl-1-piperidyl, A, 56.5, 115.7-6.7°; 3,4-Cl2, O,
4-methyl-1-piperidyl, A2, 92.5, 144.0-4.8°; 3,4-Cl2, 0,
1-pyrrolidyl, A, 97.8, 176.8-7.4°; 3,4-Cl2, O, 2-pyrrolidon-1-yl,
A, 89.3, 151.8-2.7°; 3,4-C12, 0, 3,4-C12, 2-thiono-1-pyridyl, A4,
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90.5, 171.9-2.8°; 3,4-Cl2, S, 2-thiono-1-pyrrolidyl, A7, 52.6,
126.7-7.2°; 3,4-C12, 0, 3-methylpyrazin-5-on-1-yl, A4, 62.3,
228.0-9.0^{\circ}; 3,4-C12, 0, 2,4,6-trimethyl-1-piperidyl, A, 85.5,
135.3-6.1°; 3,4-C12, 0, 1-decahydroquinoly1, A, 99.7,
160.5-1.4°; 3,4-Cl2, 0, 2-decahydroisoquinoly1, A, 90.4,
144.0-5.0°; 3,4-Cl2, 0, 1,2-dihydro-6-ethoxy-2,2,4-trimethyl-1-
quinoly1, A, 54.0, 139.3-40.2°. For 3,4-C12C6H3NHCSNRR', R, R',
procedure, % yield, and m.p. are: H, CH2CH2CH2OH, A2, 99.0, 34-5°;
H, 4-C1C6H4, B, 82.0, 154.2-4.9°; H, 3-C1C6H4, B, 75.5,
119.5-20.5°; H, Ph, B, 99.0, 136.1-7.0°; H, 3-BrC6H6, A7,
74.6, 107.5-8.3°; H, 3,4-Cl2C6H3, B, 94.5, 162.6-3.5°; H,
2-thenyl, A, 99.0, 153.2-4.1°; iso-Pr, allyl, A2, 93.4,
80.8-1.6°; iso-Pr, MeC.tplbond.C, A2, 88.7, 77.2-7.8°.
Procedures are given for new compds. 3,4-Cl2C6H3XC6H4R, for which X, R, %
yield, and m.p. follow: CONH, 3,4-d-C12, 86.5, 232.6-3.3°; CSNH,
4-C1, 77.0, 144.5-5.3°; CONH, 4-C1, 80.0, 167.3-8.1°;
CH2NH, 4-Cl, 18.5, 169.0-0.5°; NHCH2, 4-Cl, 18.0,
122.3-3.1°; NHCO, 4-Cl, 73.3, 176.6-7.4°; N:CH, 3,4-Cl2,
86.5, 132.3-3.0°; N:CH, 4-Cl, 81.0, 103.7-4.4°; NHCH2CO,
4-C1, 80.0, 182.5-3.7°; NHCOCH2CONH, 3,4-C12, 28.7, 227.8-8.6;
CH:CHCOCH:CH, 3,4-Cl2, 59.3, 202.1-2.8°; NHCOCONH, 3,4-Cl2, 27.3,
228.2-9.1°; NHC(:NH)NH, 3,4-Cl2, 74.0, 181.1-2.0°; NHCOCH:CHCONH, 3,4-Cl2, 85.0, 227-9°; NHCO2CH2CH2OCONH, 3,4-Cl2,
79.3, 217.3-18.0°; NHCONH(CH2)4NHCONH, 3,4-Cl2, 100.0,
197.2-8.2°; NHCOC6H4 CONH-o, 3,4-Cl2, 71.8, 256-7°;
NHCONHC6H4NHCONH-p, 3,4-Cl2, 94.3, above 360°; NHCONHCH2, 3,4-Cl2, 90.0, 194.7-5.8°; CH2NHCONH, 4-Cl, 88.8, 213.2-13.7°;
NHCO2C6H4O2CNH-p, 3,4-C12, 84.5, 279-80°; NHSONH, 3,4-C12, 70.6,
49.5-50.2°; NHCO2CH2CH2SCH2CH2OCONH, 3,4-Cl2, 87.3,
141.4-2.5°; CONHCONHCO, 3,4-C12, 70.0, 199.6-200.4°;
NHCSNHNHCSNH, 3,4-Cl2, 89.9, 169° (decomposition); NHCONHNHCONH,
3,4-C12, 88.8, 233-4°; NHCONHNH, H, 97.8, 172.2-3.1°;
NHCO2(CH2)4OCONH, 3,4-Cl2, 86.0, 170.9-1.8°; CCl3CH:, 3,4-Cl2,
74.9, 101.3-2.1°; NHCH:N, 3,4-Cl2, 73.0, 158.3-9.1°; NHCO2,
4-C1, 88.8, 149.5-50.7°; NHCO2, 3,4-C1, 91.5, 148.1-9.1°. I
(162.1 g.) at 75-80° treated dropwise with 60.0 g. MeC.tplbond.CBr,
the slurry held 3 hrs. at 85°, cooled, neutralized at 20°
(ice bath) with 30 q. NaOH in 500 cc. H2O, the oil extracted with Et2O, and
the extract fractionated yielded N-(2-propynyl)-3,4-dichloroaniline, b7
152.7-3.4°, nD25 1.5991. I treated with CH2:CHCH2C1 and the
product held 18 hrs. at 80-5^{\circ} yielded N-allyl-3,4-dichloroaniline, b7.5 159.0-61.0, nD25 1.5859. EtOAc (1 l.) saturated with COCl2, treated at
reflux during 2-3 hrs. with 324 g. I in 1.5 l. EtOAc under a flow of
COC12, the solution held 1 hr. at reflux, 1.5 l. EtOAc distilled at atmospheric
pressure, and the remaining EtOAc removed under a gradually increasing
vacuum yielded 90.5% 3,4-dichlorophenyl isocyanate, b10.5
116.7-18.1°, m. 40-1°. H2O (350 cc) containing 58.0 cc. 38% HCl
treated during 30 min. at 10-15^{\circ} with 80.0 g. CSC12, the cooling
bath removed, 128.0 g. I in 400 cc. PhMe added during 30-60 min., the
product held 3 hrs. at 85°, filtered, and the PhMe layer separated and fractionated yielded 95.1% 3,4-dichlorophenyl isothiocyanate, b7.0
134.8-5.9°. 3,4-Br2C6H3NH2 by the same method yielded 86.5% crude
3,4-dibromophenyl isothiocyanate.
121975-58-4, Urea, 1,1'-
[(phenylcarbamoylimino)bis(trimethylene)]bis[3-phenyl-
   (and its bacteriostatic activity)
121975-58-4 CAPLUS
Urea, N'-phenyl-N,N-bis[3-[[(phenylamino)carbonyl]amino]propyl]- (CA
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ΙT

RN

CN

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\cap
                      NHPh
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PhNH-C-NH-(CH_2)_3-N-(CH_2)_3-NH-C-NHPh
OSC.G
       17
              THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)
L4
     ANSWER 29 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN
ΑN
     1937:33067 CAPLUS
DN
     31:33067
OREF 31:4645f-i,4646a
     Aliphatic polyamines. IV
ΤI
     van Alphen, J.
ΑU
     Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1937), 56,
SO
     343-50
     CODEN: RTCPB4; ISSN: 0370-7539
DT
     Journal
LA
     Unavailable
     cf. C. A. 31, 1007.3. (CH2)3Br2 (240 g.), 360 g. of (CH2)2(NH2)2.H2O and
AB
     250 cc. absolute EtOH give 67 g. of 1,3-bis(2'-aminoethylamino)propane (I),
     b12 157°, 36 g. of II and 13 g. of III. II is
     triethylenebis(trimethylene)hexamine, b14 252°; it is a strong base
     and gives the same precipitation and color reactions as I; it gives a reddish
     violet biuret reaction with a small amount of Cu salt; HCl salt, with 2
     mols. H2O, m. 275°; H oxalate, C12H32N6.6C2H2O4, amorphous, m.
     235°; picrate, yellow, m. 220°; the condensation product
     with PhNCS, 1,16-bis(2'-phenylthioureido)
     -3,7,10,14-tetraphenylthiocarbamido-3,7,10,14-tetraazahexadecane, PhNHCSNH
     [CH2CH2N(CSNHPh) CH2CH2CH2N (CSNHPh)]2-CH2CH2NHCSNHPh, amorphous, m.
     135-40°; II and CS2 in EtOH give a yellow, amorphous precipitate; heating
     at 190-200° splits off H2S and gives 1,3-bis[3' -
     (2'-thiotetrahydroimidazolyl - 1'') - propyl] - 2 - thiotetrahydro -
     imidazole, m. 166-7^{\circ}. Reaction of II with BzH and reduction with
     Na in absolute EtOH gives 1,20-diphenyl-2,5,9,12,16,19-hexaazaeicosane, with 2
     mols. H2O, m. 54^{\circ}; the HCl salt, C26H44N6.6HCl, m. above
     300° (decomposition); nitrate, m. 211°; picrate, yellow, m.
     211°; the HCl salt and NaNO2 give the hexa-NO derivative, m.
     86^{\circ}. III, b14 316^{\circ}, is a mixture containing
     1,4,8,11-tetraazacyclotetradecane; this also is formed from I and
     (CH2)3Br2; HCl salt, C10H24N4.4HCl.H2O; nitrate, m. 205°
     (decomposition); picrate, decomps. 210°; H oxalate, decomps.
     221°; with BzH on reduction there results a small quantity of 1,27
     - diphenyl - 2,5,9,12,16,19,23,26-octaazaheptacosane, whose HCl salt,
     C31H56N8.8HCl, m. above 300°; this indicates that
     1,23-diamino-3,7,10,14,17,21-hexaazatricosane is present in III. Other
     fractions, b1, 244° and b1 275°, are amines of the type
     (CH2CH2NHCH2CH2CH2) n.
     854247-55-5P, Ethylenediamine,
     N, N'-bis[3-[3-phenyl-1-[2-(3-phenyl-2-thioureido)ethyl]-2-
     thioureido]propyl]-N, N'-bis(phenylthiocarbamyl)-
     RL: PREP (Preparation)
        (preparation of)
RN
     854247-55-5 CAPLUS
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PAGE 1-B

CM

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1937:7774 CAPLUS

DN 31:7774

OREF 31:1007b-q

TI Aliphatic polyamines. III

AU van Alphen, J.

SO Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1936), 55, 835-40 CODEN: RTCPB4; ISSN: 0370-7539

DT Journal

LA Unavailable

AΒ cf. C. A. 30, 7100.4. 1,3-Bis[(2'-aminoethyl)amino]-propane (I), b. 286-7°, b35 185-6°, was prepared along with another amine, b35 274-6°, by adding slowly 150 g. of CH2(CH2Br)2 in 250 cc. of absolute alc. to 250 g. of 1,2-diaminoethane hydrate. The mixture was warmed for 1hr., 200 g. KOH added, warmed 0.5 hr., filtered, distilled, the residue cooled, separated from solid KOH, and redistd. in vacuo. I forms a tripicrate, m. 171°, by adding a solution of picric acid to a solution of the amine, and a tetrapicrate, m. 223° (indefinite), by the reverse procedure or by heating the tripicrate with picric acid. Its tetraoxalate m. 237°. I in H2O is basic, gives a white precipitate with Nessler's reagent, phosphotungstic acid, reduces Ag salts and KMnO4 but not Fehling solution, reacts with Br water and with I2 in KI solution, gives a reddish violet color with a Cu salt and a rose-red with a Ni salt. The following derivs. of I have been prepared: 1,3-bis{3'-phenyl-1'-[2'-(3''phenylureido)ethyl]ureido}propane, m. 145-55°, by mixing with PhNCO in ether solution; 1,3-bis $\{3'-phenyl-1'-[2'-(3''-1)]\}$ phenylthioureido)ethyl]thioureido}propane, m. 179°, with PhNCS; 1,3-bis{[2'-(benzoylamino)ethyl]-benzoylamino}propane, m. 172°, by the Schotten-Baumann method; 1,3 - bis(2' - thiotetrahydroimidazolyl - 1' -)propane, m. 156°, by heating at 140° the precipitate formed with CS2 in alc.; 1,3-bis-{[2'-(benzylamino)ethyl]amino}propane (II), from the reaction of I with 3 mols. of BzH, the product dissolved in absolute EtOH, 6 atoms Na added, the HCl salt precipitated with HCl (m. $270-90^{\circ}$

(decomposition)), and the free base obtained as an oil by treating with strong NaOH. The oil solidifies and crystallizes from H2O with 1 H2O, m. 44°; tetrapicrate, m. 201°; tetraoxalate, m. 247°. II forms the following derivs.: 1,3-bis{ [2'-(benzyl-nitrosoamino)ethyl]nitrosoaminolpropane, m. 99°, with NaNO2 and HCl in H2O; 1,3-bis{3'-phenyl-1'-[2''-(1'''-benzyl-3''' phenylthioureido)ethyl]thioureido)propane, m. 130-5°, with PhNCS in alc.; 1,3-bis(2'-phenyl-3'-bensyltetrahydroimidazolyl-1'-)propane, m. 123°, with 1 mol. BzH, the mixture dissolved in ether and dried over anhydrous Na2SO4 and evaporated; 1,3-bis[2'-(p-methoxyphenyl)-3'benzyltetrahydroimidazolyl-1'-]propane m. 110°, with anisaldehyde as above.

ΙT 854657-59-3P, Urea, 1,1'-trimethylenebis[3-phenyl-1-[2-(3phenylureido)ethyl]- 854657-61-7P, Urea, 1,1'-trimethylenebis[3-phenyl-1-[2-(3-phenyl-2-thioureido)ethyl]-2-thio-RL: PREP (Preparation) (preparation of)

854657-59-3 CAPLUS RN

2,5,9,12-Tetraazatridecanediamide, CN N1,N13-diphenyl-5,9-bis[(phenylamino)carbonyl]- (CA INDEX NAME)

854657-61-7 CAPLUS RN

CN 2,5,9,12-Tetraazatridecanedithioamide, N1,N13-diphenyl-5,9-bis[(phenylamino)thioxomethyl]- (CA INDEX NAME)

OSC.G THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

T. 4 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2010 ACS on STN

1936:45195 CAPLUS ΑN

30:45195 DN

OREF 30:5992h-i,5993a-e

Aliphatic polyamines. I ΤI

van Alphen, J. ΑU

Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1936), 55, SO 412-18

CODEN: RTCPB4; ISSN: 0370-7539

DTJournal

English LA

1,2-Bis(aminoethylamino)ethane (I), the triethylenetetramine of Hofmann (Ber. 3, 762(1870); 4, 666(1871); 23, 3297, 3711(1890)) is prepared in good yield as follows: pour 150 g. (CH2Br)2 in 125 cc. absolute EtOH slowly into 250 g. of 1,2-diaminoethane hydrate in 125 cc. absolute alc., reflux 1 hr.,

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add 250 g. solid KOH and continue heating 10 min., stand overnight,
filter, distil at atmospheric pressure to 130°, cool. Distil the upper
layer in vacuo. Two fractions are obtained: I, b31 174°, and
1-(aminoethylaminoethyl)-piperazine or tetraethylenetetramine (II), b31
266-70^{\circ}. I loses its 0.5 mol. H2O when distilled at ordinary pressure
and b. 272°. It is characterized by its tetra-Bz derivative m.
236° (from alc.). I yields the following derivs.: 1,2 - bis{3' -
phenyl - 1' - [2'' - (3''' - phenylureido)-ethyl]ureido}ethane, m.
237°, by adding PhNCO in ether and recrystg. the precipitate from EtOH;
1,2-bis-{3'-phenyl-1'-[2''-(3'''-phenylthioureido)
ethyl]thioureido}ethane, m. 206^{\circ}, by mixing with PhNCS in absolute alc.
and purifying the insol. precipitate by extracting with boiling alc.;
1,3-bis(2''-benzylidene-aminoethyl)-2-phenyltetrahydroimidazole, m.
86^{\circ} (immediately decomposed by dilute HCl), from 14.6 g. I and 31.8 g.
BzH; 1,2-bis-{[ (2''',4'''-dinitrophenyl) { (2'',4''-dinitrophenylamino)
ethyl}] amino} -ethane (III), m. 285°, by boiling 6.7 g. I, 5 g.
1-bromo-2,5-dinitrobenzene, 5 g. NaOAc and 20 cc. EtOH for 1 hr., extracting
the amorphous precipitate with H2O and boiling alc., dissolving in hot Me2CO
(from which it suddenly ppts. as crystals and is then insol.), and
recrystg. from boiling PhNO2; 1,2-bis(3'-thiotetrahydroimidazole-1')-
ethane, m. 265° (recrystd. from H2O), by mixing alc. I with alc.
CS2 and heating the precipitate of yellow thiocarbamate which loses H2S at
120-40°; 1,2 - bis{[(2''',4''',6''' - trinitrophenyl)]
{(2'', 4''6''-trinitrophenylnitramino)ethyl}]amino}-ethane, which
decomposes at 165° and explodes when heated suddenly, was prepared
from 0.5~\mathrm{g}. III and 5~\mathrm{cc}. HNO3 cooled to -~15^{\circ}, and precipitated by adding
ice water slowly. II, a strong base, is a pale yellow viscous liquid with
tobacco-like smell, miscible with H2O and EtOH but not with Et2O. Its
formula is proved by the formation of the following compds.:
tetra-picrate, m. 212°, tetra-oxalate, m. 289°, tri-Bz
derivative: 4-benzoyl-1-[2'-{(benzoyl)
(2''-benzoylaminoethyl)-amino}ethyl]-piperazine, prepared by the
Schotten-Baumann method but could not be crystallized; its di-picrate, m.
221°; 4 - phenylthiocarbamido - 1 - {2' -
[{phenylthiocarbamido-[2'' - (3''' - phenylthioureido) ethyl}amino]ethyl}
piperazine, m. 132-40^{\circ} (decomposition) from the reaction of alc. II with
alc. PhNCS and repeatedly extracted with boiling alc.; and the mono-Bz
derivative, 1-(benzylaminoethylaminoethyl)-piperazine-H2O, m. 50°
(recrystd. from H2O), prepared by mixing 1 mol. of II with 2 mols. BzH,
dissolving in absolute EtOH, adding 4 atoms Na, precipitating with strong HCl
treating with H2O and NaOH; its tetra picrate, m. 212° (decomposition).
88936-58-7P, Urea, \alpha, \alpha'-ethylenebis[\beta-phenyl-
\alpha\text{--}[\beta\text{--}(\beta\text{--phenylthiocarbamido})\,\text{ethyl}]\text{thio--}
122595-05-5P, Urea, \alpha, \alpha'-ethylenebis[\beta-phenyl-
\alpha-[\beta-(\beta-phenylcarbamido)ethyl]- 858833-83-7P,
1-Piperazinecarboxanilide, 4-[\beta-[\beta-phenyl-\alpha-[\beta-
(\beta-phenylthiocarbamido)ethyl]thiocarbamido]ethyl]thio-
RL: PREP (Preparation)
   (preparation of)
88936-58-7 CAPLUS
2,5,8,11-Tetraazadodecanedithioamide,
N1, N12-diphenyl-5, 8-bis [(phenylamino)thioxomethyl]- (CA INDEX NAME)
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and

ΙT

RN

CN

RN 122595-05-5 CAPLUS

CN 2,5,8,11-Tetraazadodecanediamide, N1,N12-diphenyl-5,8-bis[(phenylamino)carbonyl]- (CA INDEX NAME)

RN 858833-83-7 CAPLUS

CN 1-Piperazinecarbothioamide, N-phenyl-4-[2-[[(phenylamino)thioxomethyl]][2-[[(phenylamino)thioxomethyl]amino]ethyl]amino]ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)